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# IONCAP Prediction-Based Automatic Link Establishment (ALE) Frequency Selection for a Ten-Node Australian High-Frequency Network

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## **PREFACE**

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A handwritten signature in cursive script, appearing to read "D. M. Viccione", is written over the printed name.

**D. M. Viccione**  
**Head, Submarine Electromagnetic Systems Department**

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# IONCAP PREDICTION-BASED AUTOMATIC LINK ESTABLISHMENT (ALE) FREQUENCY SELECTION FOR A TEN-NODE AUSTRALIAN HIGH-FREQUENCY (HF) NETWORK

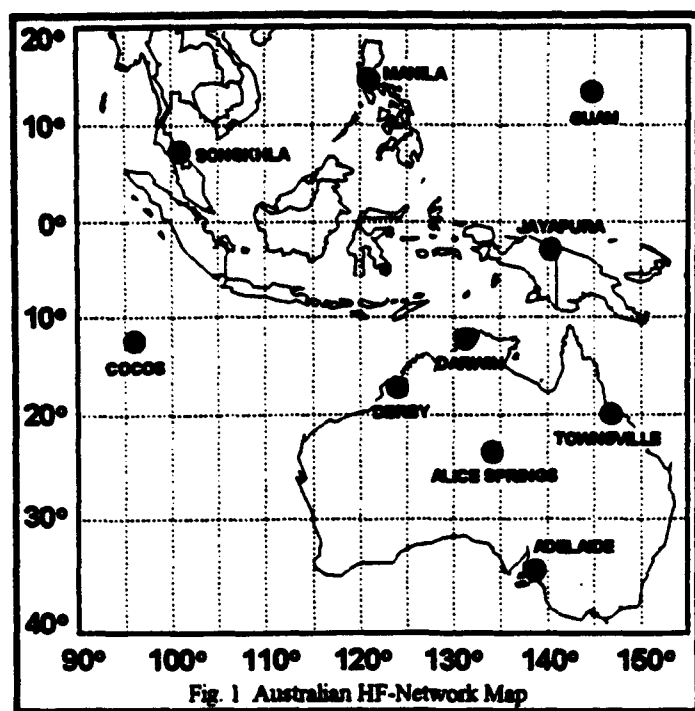
## INTRODUCTION

This report presents the results of a high-frequency (HF) propagation analysis performed for a ten-node Australian HF network using the IONCAP computer program. This analysis was performed for months in different seasons and sunspot numbers. The ten-node network locations are listed in table 1 and are plotted on the map in figure 1. The objective of this effort was to establish a preliminary approach for automatic link establishment (ALE) frequency-set selection. A tacit objective of this analysis was to determine the fewest number of frequencies that would provide the greatest network connectivity. This analysis is based only on predicted propagation connectivity with no consideration of link and network communication protocols or operation. In addition, it was assumed that a single frequency set would be employed over a 24-hour period in a single month.

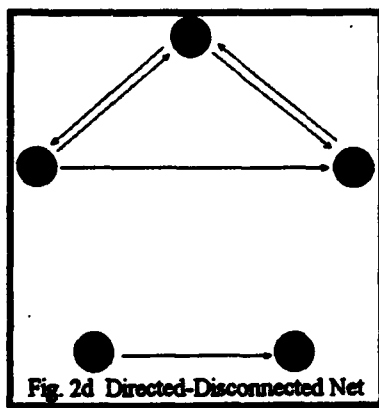
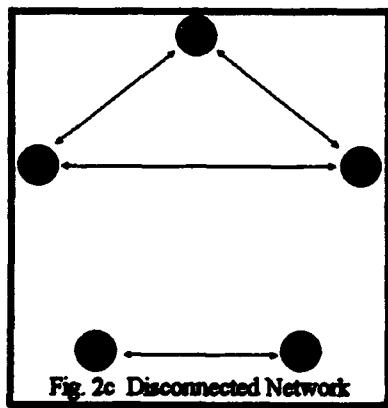
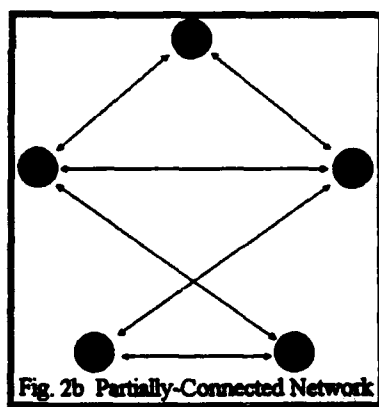
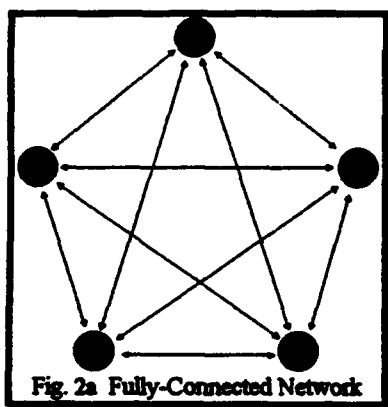
Even with the analysis limited to network connectivity, many graph-theoretic calculations are nevertheless possible. For example, a *fully-connected* network consists of a set of nodes with a communications link between each pair of nodes, i.e., no relays are required. In this context, a link exists between two nodes if IONCAP predicts at least one usable frequency in both link directions. A frequency  $f$  is considered usable from node  $i$  to node  $j$  when the transmissions from node  $i$  on  $f$  are received at node  $j$  with the minimum specified signal-to-noise ratio (SNR) at some desired reliability. An example of a fully connected network is shown in the graph of figure 2a for the ALE HF case, this connectivity would be achieved with a specific set of frequencies, although not all links would exist simultaneously on the same frequency. It has been assumed that the ALE controller would ultimately determine the optimum frequency within each set to establish each link.

**Table 1. Australian HF Network Nodes**

Node ID	Nearest City	Latitude	Longitude
0	Adelaide, Australia	34°52' S	138°30' E
1	Darwin, Australia	12°20' S	130°50' E
2	Alice Springs, Australia	23°40' S	135°35' E
3	Townsville, Australia	19°20' S	146°50' E
4	Derby, Australia	17°18' S	123°38' E
5	Jayapura, Indonesia	2°28' S	140°38' E
6	Guam Island	13°27' N	144°45' E
7	Manila, Philippines	14°40' N	121°03' E
8	Songkhla, Thailand	7°13' N	100°37' E
9	Cocos Island	12°12' S	96°54' E



**Figure 1. Australian HF Network Map**



**Figure 2. Australian HF Network Connections**

As the SNR requirement at each node receiver is increased, the sort-performing links begin to fail and only partial connectivity (*partially-connected* network) is achieved. In other words, some links exist for which the ALE controller cannot find an acceptable frequency for the specified minimum SNR. At this point, network connectivity becomes fragmented and may appear as shown in figure 2b. In this figure, one or more relays are required to create a path (sequence of links) connecting each pair of nodes in the network.

As the minimum required SNR is further increased, network connectivity degrades until at least one pair of nodes exists for which there is no interconnecting path. The network has now been divided into multiple independent subnetworks with no usable links between subnetworks. This *disconnected* network configuration is depicted in figure 2c. Note that each subnetwork is a single *partially-connected* network.

HF antennas, noise environments, and terrain differ at different network nodes. As a result, the SNR in opposite link directions may differ significantly. In this case, the network graph corresponding to figure 2c might appear as in figure 2d (i.e., a *directed-disconnected* network configuration). The network paths to communicate from node number  $i$  to node  $j$ , therefore, differ from the network paths needed to communicate from node  $j$  to node  $i$ . Thus, the ALE-chosen frequency in one link direction may differ from the corresponding frequency in the opposite link direction.

## APPROACH

An important objective of this study was to investigate methods for establishing frequency sets for use in HF-ALE networks. In particular, techniques would be considered for determining the smallest frequency set that provides a fully-connected network. In general, different frequency sets would be determined for different seasons and sunspot numbers. It is assumed that a single frequency set is required throughout a typical day in each month. Of course, different frequency sets would be used in different months.

Four software routines were developed for use with IONCAP. The first routine was designed to execute IONCAP automatically for each of the 90 possible one-way links formed by the ten-node network. Each link corresponds to a different transmitter-receiver combination modeled with the following IONCAP input parameters:

- Frequencies: 3, 6, 9, 12, 15, 18, 21, 24, 27, and 30 MHz,
- Times-of-day: 2, 6, 10, 14, 18, and 22 UT,
- Sunspot numbers: 50 and 150,
- Months: June and December,
- Noise environment: rural,
- Antennas: 0-dBi constant (omnidirectional) gain, and
- Transmit power: 1.0 kW.

The result of this execution was a set of  $24 \times 90 = 2160$  IONCAP output files.

The second software routine extracted pertinent data from the 90 IONCAP output files for each sunspot number/month combination (for example, see Appendix A, page A-1-1) to create a single output file. This new file contained SNR-values for each frequency and transmitter-receiver combination.

The third software routine reorganized the IONCAP data into tables of SNR for each transmitter location (node *i*) versus received location (node *j*). Thus, a table is provided for each frequency and time-of-day (e.g., see Appendix A, page A-2-1).

The fourth routine used the IONCAP data from each of the output files created by the third routine to create tables quantifying network connectivity for different values of required SNR. Two types of tables were created. The first table lists the nodes predicted to receive a signal with the minimum required SNR from each (transmit) node and link-usable frequency. This table describes network connectivity as a function of the specific time-of-day, month, and sunspot number. The data contained in the first table is used to form the entries in the second table. For each node (as transmitter), the second table gives the number of nodes (as receivers) which are linked using 1, 2, ..., or 10 frequencies. These four routines were used to create the network analysis results contained in the four appendices to this report.

## **SAMPLE RESULTS**

The appendices document the results of a three-step analysis for each month and sunspot number. Step 1 corresponds to the data reorganization performed by the "second" software routine described above. Similarly, the second and third steps correspond to the analysis performed by the third and fourth routines, respectively. (Step 0 may be considered the automatic execution of IONCAP to create the data sorted in Step 1.)

Consider the network connectivity predicted for June with a sunspot number of 150 and a minimum required SNR-per-bit value of 40 dB-Hz. The table of contents preceding the appendices indicates that the Step 3 and Step 4 analysis results for this case are provided beginning on page C-3b-1 for 2 UT and ending on page C-3b-5 for 22 UT.

At 2 UT, the second table on page C-3b-1 shows that at least two frequencies are required for each node to maintain a usable link with all other nodes in the network. The first table entry shows that Adelaide can communicate with only eight of nine possible other nodes in the network using one frequency. The entry in the next column of the same row shows that Adelaide can reach all nine other nodes with at least two frequencies.

Next, a visual analysis of the columns of the first table (page C-3b-1) was performed to determine the possible single frequencies or frequency pairs for nine-node connectivity from Adelaide. From this analysis, the usable frequency pairs were (9,27), (12,27), (15,27), (18,27), (21,27), and (21,30) MHz. Similarly, single frequencies and frequency pairs were found for all the other nodes in the network for 2 UT, June, 150 sunspot number. The results of this analysis have been compiled in table 2.

**Table 2. Single Frequencies and Frequency Pairs for June, 150 Sunspot No., 2 UT**

Node ID	Nearest City	Frequencies and Frequency Pairs (MHz)
0	Adelaide, Australia	(9,27), (12,27), (15,27), (18,27), (21,27) (21,30)
1	Darwin, Australia	21,24 (9,27), (12,27), (15,27), (18,27)
2	Alice Springs, Australia	(9,24), (12,24), (15,24), (18,24), (21,24) (12,27), (15,27), (18,27), (21,27) (12,30), (15,30), (18,30), (21,30)
3	Townsville, Australia	24 (12,27), (15,27), (18,27), (21,27) (21,30)
4	Derby, Australia	21, 24 (9,27), (12,27), (15,27), (18,27)
5	Jayapura, Indonesia	24 (21,30), (27,30)
6	Guam Island	(21,27)
7	Manila, Philippines	(15,27), (18,27), (21,27), (24,27) (15,30)
8	Songkhla, Thailand	(24,30)
9	Cocos Island	24, 27

The next step in this analysis is to determine the smallest number of frequencies allowing each node to communicate with every other node at 2 UT. Evidently, nodes 6 and 8 each require a single frequency pair with no frequencies in common. These pairs must be included in the frequency set, i.e., (21, 27) MHz and (24,30) MHz. The frequency pair (21,27) MHz is also usable by nodes 0, 2, 3, and 7. The single frequency 21 MHz provides links to all nodes from nodes 1 and 4. The 24-MHz frequency provides links from nodes 5 and 9 to all other nodes. Thus, the predicted frequency set {21, 24, 27, 30} assures a fully-connected ALE-HF network at 2 UT.

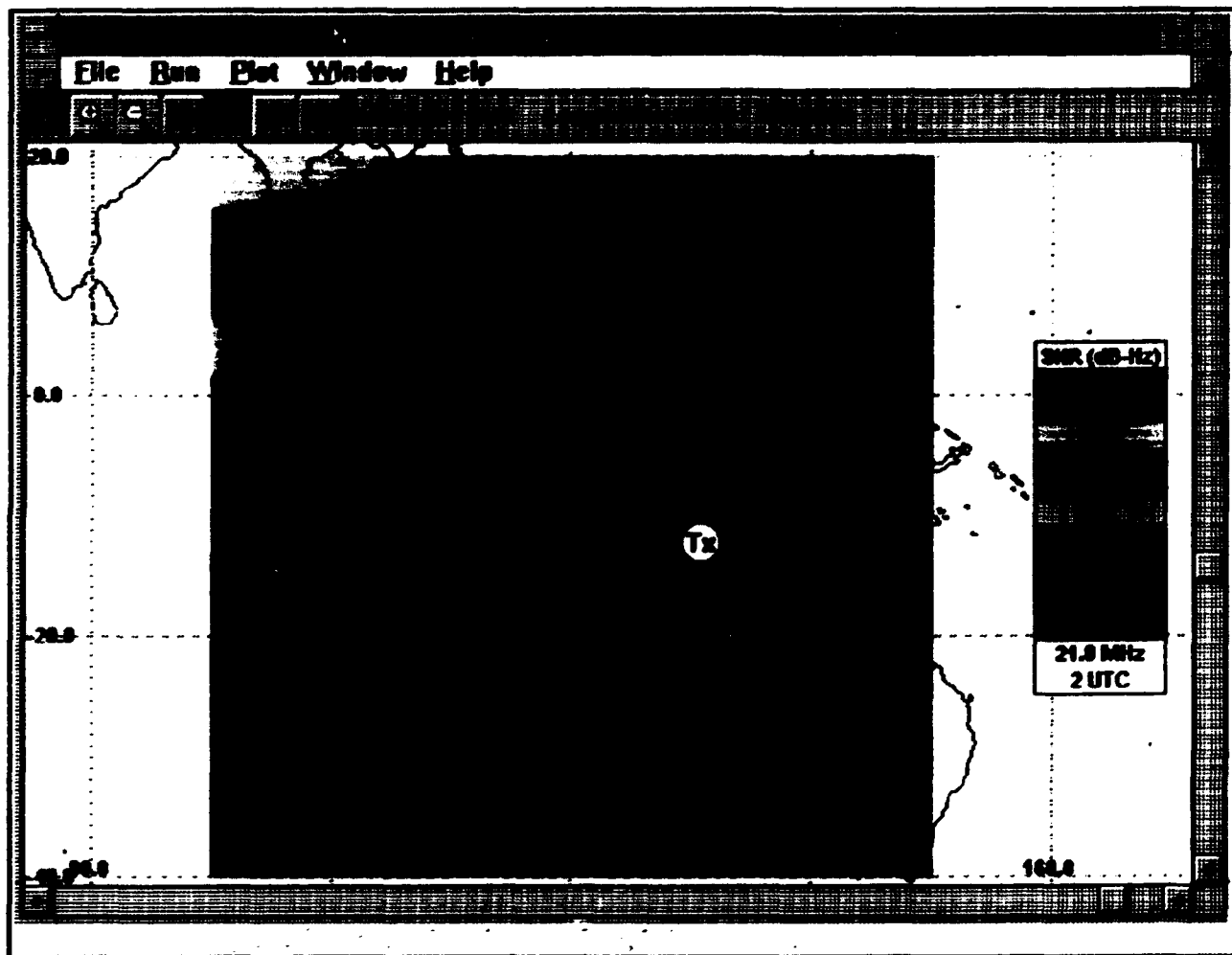
This procedure would be continued for the remaining times-of-day, adding frequencies whenever necessary to retain maximum connectivity. From a propagation perspective, this final frequency set would be used in the ten-node network to assure maximum network connectivity for a typical day in the month of June with a sunspot number of 150.

Figure 3 is a map showing HF-radio coverage contours of SNR-per-bit with the Darwin node as the transmit site. The Darwin site (node 1) was linked to all other nodes in the Australian network on either 21 or 24 MHz at 2 UT on June days with a 150 sunspot number. The figure shows that all nodes were within the 40-dB-Hz contour for these frequencies, matching the results plotted in the contour map.

## SUMMARY AND RECOMMENDATIONS

Preliminary software has been written to support the selection of ALE HF frequency sets exclusively from a propagation perspective. At this point, the determination of the nominal frequency set from the results of this software requires a tedious manual analysis. The analysis software requires separate user actions to execute each of the four software procedures. Moreover, the existing software has been tailored for the ten-node Australian network case.

For these reasons, it is recommended that the manual procedures employed in this example be automated within the existing IONWIN graphical user interface (GUI) for the IONCAP program. This automation would include not only a streamlined execution of the four routines previously mentioned, but it would also permit a speedy and error-free frequency-set selection. In addition, different frequency sets could be rated in terms of the *percentage* connectivity they provided. In other words, each frequency set would be rated by the corresponding percent of all network links provided by the set. These results could be provided for fully, partially, or even disconnected networks.



**Figure 3. Color Contour Map for 2 UT, June, 150 Sunspot No., Darwin Transmit Site**

# **NUWC 10-Node Network Analysis**

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Required SNR = 20 dB-Hz	<b>A-3a-1</b>
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Step 2 results, SNR for each node-to-node combination	<b>B-2-1</b>
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Required SNR = 20 dB-Hz	<b>B-3a-1</b>
Required SNR = 40 dB-Hz	<b>B-3b-1</b>
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Step 1 results, IONCAP data reduction	<b>C-1-1</b>
Step 2 results, SNR for each node-to-node combination	<b>C-2-1</b>
Step 3 results, Node connectivity and frequency planning	
Required SNR = 20 dB-Hz	<b>C-3a-1</b>
Required SNR = 40 dB-Hz	<b>C-3b-1</b>
Required SNR = 60 dB-Hz	<b>C-3c-1</b>
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Step 1 results, IONCAP data reduction	<b>D-1-1</b>
Step 2 results, SNR for each node-to-node combination	<b>D-2-1</b>
Step 3 results, Node connectivity and frequency planning	
Required SNR = 20 dB-Hz	<b>D-3a-1</b>
Required SNR = 40 dB-Hz	<b>D-3b-1</b>
Required SNR = 60 dB-Hz	<b>D-3c-1</b>
Required SNR = 80 dB-Hz	<b>D-3d-1</b>



Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 12  
 Sunspot Number = 150.00

TX LOCATION = -34.87, 138.50

RX LOCATION = -12.33, 130.83

2.0	24.7	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	54.	****	****	-27.	16.	31.	19.	54.	59.	49.	38.	SNR	
6.0	26.3	20.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	57.	****	-76.	-4.	28.	37.	51.	57.	61.	55.	44.	SNR	
10.0	24.3	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	59.	4.	31.	41.	49.	54.	57.	60.	62.	47.	26.	SNR	
14.0	25.9	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	66.	16.	34.	46.	54.	60.	63.	66.	66.	56.	42.	SNR	
18.0	19.6	15.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	63.	20.	39.	50.	58.	63.	64.	55.	42.	22.	-4.	SNR	
22.0	22.5	19.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	62.	-65.	15.	36.	52.	57.	61.	63.	53.	38.	14.	SNR	

TX LOCATION = -34.87, 138.50

RX LOCATION = -23.67, 135.83

2.0	18.6	16.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	62.	****	-23.	31.	60.	64.	59.	51.	49.	43.	28.	SNR	
6.0	16.2	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	65.	-58.	14.	43.	63.	63.	45.	41.	27.	-6.	-12.	SNR	
10.0	14.4	11.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	44.	57.	60.	64.	59.	44.	20.	-13.	-12.	-11.	SNR	
14.0	14.4	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	66.	43.	55.	62.	67.	63.	45.	17.	-14.	-13.	-13.	SNR	
18.0	11.2	8.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	62.	51.	57.	63.	59.	29.	-12.	-12.	-11.	-11.	-10.	SNR	
22.0	13.5	11.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	68.	1.	51.	63.	68.	62.	51.	31.	7.	-14.	-13.	SNR	

TX LOCATION = -34.87, 138.50

RX LOCATION = -19.33, 146.83

2.0	23.1	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	66.	****	-59.	1.	32.	53.	61.	62.	45.	48.	46.	SNR	
6.0	20.8	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	61.	-61.	7.	35.	47.	58.	62.	60.	50.	35.	16.	SNR	
10.0	19.4	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	34.	48.	52.	58.	62.	66.	56.	36.	5.	-30.	SNR	
14.0	19.9	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	67.	32.	44.	54.	61.	66.	69.	60.	43.	15.	-17.	SNR	
18.0	15.2	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	63.	43.	50.	57.	64.	65.	44.	6.	-36.	-38.	-37.	SNR	
22.0	18.7	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	-21.	30.	52.	60.	65.	67.	58.	47.	33.	11.	SNR	

TX LOCATION = -34.87, 138.50

RX LOCATION = -17.30, 123.63

2.0	23.4	20.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	58.	****	****	-13.	25.	22.	54.	59.	35.	-6.	-33.	SNR	
6.0	22.9	18.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	56.	****	-82.	0.	31.	37.	55.	60.	53.	41.	19.	SNR	
10.0	21.9	18.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

63.	60.	10.	35.	46.	52.	56.	60.	63.	50.	27.	-5.	SNR
14.0	22.6	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
65.	65.	29.	40.	51.	58.	62.	65.	66.	55.	37.	10.	SNR
18.0	17.5	13.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
63.	63.	28.	43.	53.	60.	64.	57.	36.	-2.	-44.	-55.	SNR
22.0	20.0	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
63.	61.	-49.	22.	40.	55.	59.	63.	56.	46.	31.	11.	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = -2.47, 140.63												
2.0	33.6	27.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
55.	52.	****	****	****	-14.	16.	28.	38.	28.	51.	55.	SNR
6.0	35.6	28.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
54.	59.	****	-58.	-7.	20.	33.	42.	53.	57.	58.	60.	SNR
10.0	31.3	25.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
56.	62.	5.	27.	38.	47.	53.	57.	60.	62.	63.	62.	SNR
14.0	34.7	28.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
57.	64.	10.	27.	40.	48.	54.	62.	64.	64.	64.	64.	SNR
18.0	25.5	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
56.	62.	21.	35.	47.	56.	60.	62.	62.	61.	52.	42.	SNR
22.0	29.1	24.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
54.	61.	****	-7.	26.	40.	51.	56.	58.	60.	61.	52.	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = 13.45, 144.75												
2.0	29.9	24.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
41.	33.	****	****	****	-48.	-11.	8.	26.	32.	39.	41.	SNR
6.0	31.8	25.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
48.	49.	****	****	-35.	1.	21.	33.	42.	49.	51.	51.	SNR
10.0	27.9	23.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
51.	55.	-1.	25.	32.	38.	43.	47.	52.	56.	55.	30.	SNR
14.0	29.0	23.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
50.	59.	-4.	29.	42.	49.	53.	57.	59.	59.	57.	40.	SNR
18.0	22.0	17.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
42.	56.	6.	29.	43.	52.	56.	56.	53.	29.	0.	-43.	SNR
22.0	25.0	21.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
50.	52.	****	-33.	11.	30.	42.	49.	51.	52.	20.	-29.	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = 14.67, 121.05												
2.0	24.9	22.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
40.	35.	****	****	-91.	-30.	2.	22.	31.	39.	19.	-7.	SNR
6.0	31.9	25.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
36.	44.	****	****	-95.	-18.	7.	20.	35.	42.	46.	47.	SNR
10.0	28.6	23.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
48.	53.	-16.	20.	28.	35.	41.	45.	50.	54.	55.	33.	SNR
14.0	27.9	22.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
49.	57.	3.	28.	39.	46.	50.	54.	58.	57.	53.	35.	SNR
18.0	24.3	19.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
42.	58.	2.	32.	47.	54.	57.	58.	57.	49.	25.	-3.	SNR
22.0	23.0	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
37.	52.	****	-17.	16.	35.	46.	51.	52.	27.	-23.	****	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = 17.22, 100.62												
2.0	28.3	22.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
36.	33.	****	****	****	-47.	-10.	13.	23.	34.	38.	21.	SNR
6.0	32.3	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ

29.	35.	****	****	****	-63.	-24.	2.	16.	32.	37.	39.	SNR	
10.0	29.6	24.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	53.	-61.	0.	17.	30.	37.	43.	49.	53.	53.	35.	SNR	
14.0	27.8	22.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	55.	0.	23.	36.	43.	48.	53.	55.	55.	49.	31.	SNR	
18.0	24.3	18.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	55.	10.	26.	43.	52.	55.	55.	53.	44.	13.	-37.	SNR	
22.0	21.8	18.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
33.	50.	****	-20.	14.	32.	46.	50.	45.	1.	-80.	****	SNR	
TX LOCATION = -34.87, 138.50													
RX LOCATION = -12.20, 96.90													
2.0	22.7	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
26.	39.	****	****	-48.	-3.	20.	36.	33.	40.	50.	****	SNR	
6.0	29.2	23.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	16.	****	****	-77.	-12.	9.	28.	34.	8.	39.	43.	SNR	
10.0	20.9	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	51.	-61.	8.	29.	41.	47.	52.	49.	7.	53.	****	SNR	
14.0	20.9	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	56.	18.	37.	47.	52.	56.	57.	43.	13.	54.	****	SNR	
18.0	17.1	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	55.	30.	40.	50.	55.	55.	34.	-18.	****	****	****	SNR	
22.0	17.6	14.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	48.	-59.	9.	35.	44.	49.	37.	16.	-19.	-67.	****	SNR	
TX LOCATION = -12.33, 130.83													
RX LOCATION = -34.87, 138.50													
2.0	24.7	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	55.	****	****	-26.	17.	32.	19.	54.	59.	46.	27.	SNR	
6.0	26.3	21.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	59.	****	-76.	-2.	30.	40.	54.	59.	61.	55.	45.	SNR	
10.0	24.3	19.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	64.	20.	40.	47.	54.	59.	63.	65.	65.	51.	36.	SNR	
14.0	25.9	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	66.	29.	42.	52.	60.	64.	65.	66.	66.	57.	48.	SNR	
18.0	19.6	15.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	64.	34.	48.	56.	62.	64.	64.	55.	42.	22.	-4.	SNR	
22.0	22.5	19.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	62.	-63.	20.	39.	53.	58.	61.	64.	53.	38.	14.	SNR	
TX LOCATION = -12.33, 130.83													
RX LOCATION = -23.67, 135.83													
2.0	20.1	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	65.	****	-53.	17.	51.	59.	66.	44.	46.	44.	40.	SNR	
6.0	20.5	16.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	64.	-88.	-4.	33.	55.	61.	65.	63.	55.	40.	19.	SNR	
10.0	18.5	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	65.	40.	55.	58.	62.	66.	68.	58.	44.	23.	0.	SNR	
14.0	20.6	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
71.	71.	39.	51.	60.	66.	69.	71.	66.	58.	46.	28.	SNR	
18.0	15.3	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	67.	45.	56.	62.	68.	69.	58.	42.	19.	-4.	-15.	SNR	
22.0	16.4	13.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	68.	13.	51.	62.	65.	69.	61.	47.	36.	19.	-10.	SNR	
TX LOCATION = -12.33, 130.83													
RX LOCATION = -19.33, 146.83													
2.0	23.8	20.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

65.	60.	****	-89.	-17.	22.	47.	54.	60.	65.	41.	40.	SNR
6.0	26.0	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	64.	-80.	-3.	29.	43.	55.	60.	64.	67.	61.	52.	SNR
10.0	22.9	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	66.	32.	47.	52.	57.	62.	65.	68.	61.	52.	36.	SNR
14.0	26.1	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
69.	70.	30.	43.	53.	60.	66.	68.	70.	70.	62.	55.	SNR
18.0	18.9	14.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
67.	67.	44.	51.	57.	64.	67.	68.	58.	45.	26.	3.	SNR
22.0	20.9	17.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
69.	66.	-5.	37.	55.	61.	63.	67.	68.	52.	36.	20.	SNR
TX LOCATION = -12.33, 130.83												
RX LOCATION = -17.30, 123.63												
2.0	15.5	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
45.	62.	****	-22.	47.	60.	65.	42.	40.	33.	16.	-18.	SNR
6.0	17.9	15.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
66.	64.	-94.	3.	49.	59.	64.	63.	59.	50.	35.	19.	SNR
10.0	16.1	12.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
62.	64.	45.	58.	61.	64.	65.	60.	53.	39.	22.	5.	SNR
14.0	17.7	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	70.	42.	55.	62.	67.	70.	67.	62.	53.	39.	24.	SNR
18.0	13.5	10.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
66.	66.	48.	56.	63.	68.	63.	50.	28.	5.	2.	2.	SNR
22.0	13.2	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
66.	69.	36.	59.	65.	69.	57.	36.	11.	-2.	-1.	-1.	SNR
TX LOCATION = -12.33, 130.83												
RX LOCATION = -2.47, 140.63												
2.0	21.9	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
40.	62.	****	-83.	15.	45.	53.	60.	58.	21.	-36.	****	SNR
6.0	22.8	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	63.	-83.	19.	45.	50.	59.	61.	66.	61.	55.	44.	SNR
10.0	20.5	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
61.	62.	33.	51.	57.	60.	61.	64.	61.	56.	47.	32.	SNR
14.0	22.5	18.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
70.	69.	34.	49.	57.	64.	67.	69.	70.	63.	56.	46.	SNR
18.0	17.0	13.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	66.	43.	53.	60.	64.	68.	61.	50.	30.	5.	-19.	SNR
22.0	17.8	15.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	66.	8.	49.	60.	64.	66.	62.	42.	6.	-30.	-30.	SNR
TX LOCATION = -12.33, 130.83												
RX LOCATION = 13.45, 144.75												
2.0	25.3	22.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
56.	51.	****	****	-28.	12.	27.	9.	47.	53.	44.	24.	SNR
6.0	28.6	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
62.	60.	****	-20.	20.	34.	43.	47.	51.	58.	61.	52.	SNR
10.0	26.6	22.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
58.	61.	23.	44.	50.	52.	53.	55.	58.	63.	57.	49.	SNR
14.0	28.0	22.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
58.	65.	25.	47.	53.	57.	60.	64.	64.	65.	63.	54.	SNR
18.0	24.3	19.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
56.	64.	32.	48.	56.	61.	64.	64.	64.	61.	47.	32.	SNR
22.0	27.0	24.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
59.	63.	-54.	23.	42.	51.	57.	62.	62.	63.	55.	40.	SNR
TX LOCATION = -12.33, 130.83												

RX LOCATION = 14.67, 121.05

2.0	24.5	22.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	53.	****	****	-11.	22.	35.	43.	50.	56.	40.	16.		SNR
6.0	27.0	24.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	56.	****	-46.	10.	28.	38.	45.	49.	56.	60.	44.		SNR
10.0	25.9	21.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	58.	14.	43.	50.	51.	52.	52.	56.	61.	55.	46.		SNR
14.0	26.1	21.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	64.	33.	49.	53.	56.	58.	60.	64.	65.	56.	44.		SNR
18.0	25.6	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	65.	34.	51.	59.	64.	66.	64.	64.	63.	54.	45.		SNR
22.0	23.8	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	63.	-20.	30.	44.	55.	61.	62.	63.	54.	35.	2.		SNR

TX LOCATION = -12.33, 130.83

RX LOCATION = 17.22, 100.62

2.0	29.5	26.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	54.	****	****	-44.	1.	25.	36.	42.	51.	55.	47.		SNR
6.0	30.1	27.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	50.	****	****	-60.	-12.	13.	25.	37.	46.	50.	47.		SNR
10.0	29.3	26.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	61.	-28.	24.	38.	41.	44.	47.	49.	18.	61.	52.		SNR
14.0	27.8	23.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	24.	22.	41.	46.	48.	51.	53.	39.	19.	58.	48.		SNR
18.0	22.6	18.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	58.	16.	41.	50.	55.	58.	58.	57.	33.	3.	-45.		SNR
22.0	18.5	14.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	51.	-15.	19.	38.	48.	52.	48.	23.	-9.	-54.	****		SNR

TX LOCATION = -12.33, 130.83

RX LOCATION = -12.20, 96.90

2.0	30.3	26.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	56.	****	****	-21.	18.	36.	43.	35.	53.	56.	58.		SNR
6.0	38.4	32.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	57.	****	****	-52.	-3.	24.	36.	42.	51.	52.	55.		SNR
10.0	35.2	27.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	63.	-23.	29.	44.	52.	57.	61.	63.	64.	63.	63.		SNR
14.0	37.0	29.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	31.	49.	56.	60.	63.	66.	66.	66.	65.	65.		SNR
18.0	29.3	23.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	64.	33.	49.	58.	63.	65.	65.	64.	64.	62.	55.		SNR
22.0	25.6	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	61.	-5.	34.	48.	55.	60.	60.	61.	60.	51.	39.		SNR

TX LOCATION = -23.67, 135.83

RX LOCATION = -34.87, 138.50

2.0	18.6	16.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	63.	****	-23.	31.	60.	65.	59.	51.	49.	43.	28.		SNR
6.0	16.2	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	66.	-60.	14.	43.	64.	64.	46.	41.	27.	-6.	-82.		SNR
10.0	14.4	11.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	66.	49.	60.	62.	66.	61.	45.	21.	-12.	-12.	-11.		SNR
14.0	14.4	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	69.	48.	58.	64.	69.	64.	46.	18.	-14.	-13.	-13.		SNR
18.0	11.2	8.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	65.	57.	61.	66.	61.	30.	-12.	-12.	-11.	-11.	-10.		SNR
22.0	13.5	11.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	70.	68.	2.	53.	64.	69.	63.	51.	31.	7.	-14.	-13.	SNR
TX LOCATION = -23.67, 135.83													
RX LOCATION = -12.33, 130.83													
2.0	20.1	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	65.	****	-54.	16.	50.	59.	66.	44.	45.	44.	40.		SNR
6.0	20.5	16.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	62.	-90.	-3.	32.	54.	60.	64.	62.	55.	40.	19.		SNR
10.0	18.5	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	62.	30.	49.	55.	59.	62.	64.	54.	41.	22.	0.		SNR
14.0	20.6	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	69.	31.	46.	55.	62.	67.	70.	65.	58.	45.	28.		SNR
18.0	15.3	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	64.	37.	51.	58.	65.	67.	57.	41.	19.	-4.	-15.		SNR
22.0	16.4	13.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	68.	12.	49.	60.	65.	69.	60.	47.	36.	19.	-10.		SNR
TX LOCATION = -23.67, 135.83													
RX LOCATION = -19.33, 146.83													
2.0	19.1	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	65.	****	-49.	18.	52.	60.	62.	46.	47.	46.	42.		SNR
6.0	18.3	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	63.	-52.	17.	42.	60.	63.	66.	57.	43.	22.	-2.		SNR
10.0	16.5	13.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	64.	41.	51.	58.	63.	66.	60.	48.	27.	4.	-10.		SNR
14.0	18.0	14.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	69.	36.	50.	59.	65.	70.	67.	59.	46.	26.	5.		SNR
18.0	13.4	10.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	65.	49.	56.	62.	67.	61.	46.	22.	-3.	-10.	-10.		SNR
22.0	15.5	13.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	68.	-3.	49.	61.	67.	69.	58.	47.	38.	21.	-8.		SNR
TX LOCATION = -23.67, 135.83													
RX LOCATION = -17.30, 123.63													
2.0	20.4	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	62.	****	-44.	20.	52.	61.	62.	46.	47.	46.	42.		SNR
6.0	19.7	16.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	62.	****	-13.	29.	53.	61.	65.	60.	50.	33.	14.		SNR
10.0	18.1	14.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	63.	36.	53.	57.	61.	64.	66.	55.	39.	17.	-7.		SNR
14.0	19.7	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	69.	38.	49.	58.	64.	68.	70.	63.	53.	38.	18.		SNR
18.0	15.0	11.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	66.	40.	53.	60.	67.	65.	56.	37.	13.	-11.	-18.		SNR
22.0	16.0	13.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	67.	15.	50.	60.	65.	69.	58.	45.	33.	15.	-18.		SNR
TX LOCATION = -23.67, 135.83													
RX LOCATION = -2.47, 140.63													
2.0	28.2	25.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	58.	****	****	-34.	12.	29.	47.	51.	56.	60.	51.		SNR
6.0	31.0	26.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	****	-52.	6.	33.	42.	56.	58.	62.	65.	66.		SNR
10.0	27.2	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	63.	14.	34.	46.	53.	57.	60.	63.	65.	65.	55.		SNR
14.0	31.1	24.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	68.	20.	36.	48.	56.	62.	65.	66.	68.	68.	67.		SNR
18.0	22.5	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	60.	66.	27.	42.	53.	60.	64.	66.	66.	57.	45.	28.	SNR
22.0	24.4	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	64.	-62.	21.	40.	54.	59.	62.	64.	65.	46.	20.	SNR
TX LOCATION = -23.67, 135.83													
RX LOCATION = 13.45, 144.75													
2.0	33.0	29.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	48.	53.	****	****	-72.	-15.	13.	27.	37.	45.	50.	53.	SNR
6.0	36.1	30.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	60.	****	-47.	8.	24.	33.	40.	46.	53.	38.	60.	SNR
10.0	32.7	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	62.	11.	36.	44.	46.	48.	50.	53.	44.	62.	61.	SNR
14.0	34.4	27.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	38.	16.	41.	48.	52.	56.	59.	60.	59.	40.	25.	SNR
18.0	26.2	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	37.	22.	41.	49.	56.	58.	57.	35.	5.	52.	41.	SNR
22.0	29.8	25.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	52.	-15.	****	2.	31.	42.	49.	53.	55.	15.	-46.	52.	SNR
TX LOCATION = -23.67, 135.83													
RX LOCATION = 14.67, 121.05													
2.0	30.5	27.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	47.	52.	****	****	-56.	-6.	18.	30.	40.	18.	52.	52.	SNR
6.0	34.9	29.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	51.	19.	****	****	-16.	12.	25.	34.	46.	48.	33.	17.	SNR
10.0	32.2	25.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	55.	38.	-11.	33.	42.	45.	46.	48.	50.	41.	30.	59.	SNR
14.0	32.6	26.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	39.	19.	41.	47.	50.	53.	57.	58.	55.	35.	17.	SNR
18.0	21.2	16.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	59.	21.	43.	53.	59.	60.	59.	54.	28.	-3.	-47.	SNR
22.0	20.3	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	51.	54.	-67.	10.	33.	45.	52.	55.	35.	-15.	-13.	****	SNR
TX LOCATION = -23.67, 135.83													
RX LOCATION = 17.22, 100.62													
2.0	24.6	21.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	41.	37.	****	****	-50.	-16.	12.	26.	35.	41.	16.	23.	SNR
6.0	25.0	21.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	30.	33.	****	****	-86.	-28.	1.	21.	32.	39.	24.	7.	SNR
10.0	25.0	19.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	47.	48.	-37.	19.	35.	39.	43.	46.	49.	50.	33.	16.	SNR
14.0	24.5	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	42.	55.	8.	36.	44.	48.	51.	54.	55.	51.	31.	13.	SNR
18.0	25.7	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	41.	58.	2.	37.	49.	55.	57.	58.	57.	54.	34.	12.	SNR
22.0	20.6	17.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	42.	53.	-59.	3.	32.	45.	51.	53.	32.	-23.	****	****	SNR
TX LOCATION = -23.67, 135.83													
RX LOCATION = -12.20, 96.90													
2.0	29.6	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	48.	52.	****	****	-41.	10.	26.	38.	30.	3.	54.	47.	SNR
6.0	35.6	28.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	49.	14.	****	****	-70.	-7.	19.	31.	38.	49.	27.	4.	SNR
10.0	32.6	26.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	30.	-51.	23.	38.	46.	52.	55.	57.	43.	23.	60.	SNR
14.0	33.5	27.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

57.	35.	24.	42.	51.	56.	60.	61.	60.	57.	35.	13.	SNR	
18.0	26.8	20.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	41.	26.	45.	53.	59.	59.	58.	39.	60.	54.	46.	SNR	
22.0	25.1	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	38.	-37.	23.	40.	49.	52.	52.	26.	56.	47.	35.	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -34.87, 138.50													
2.0	23.1	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	66.	****	-58.	2.	33.	55.	62.	63.	46.	48.	46.	SNR	
6.0	20.8	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	-59.	8.	37.	49.	61.	65.	61.	51.	35.	16.	SNR	
10.0	19.4	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	66.	45.	54.	56.	61.	65.	68.	57.	37.	5.	-30.	SNR	
14.0	19.9	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	69.	41.	50.	59.	65.	68.	69.	60.	43.	15.	-17.	SNR	
18.0	15.2	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	49.	55.	61.	66.	66.	44.	6.	-36.	-38.	-37.	SNR	
22.0	18.7	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	65.	-21.	31.	53.	61.	65.	68.	58.	47.	33.	11.	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -12.33, 130.83													
2.0	23.8	20.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	60.	****	-89.	-16.	22.	47.	54.	60.	65.	41.	40.	SNR	
6.0	26.0	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	64.	-77.	-2.	30.	44.	56.	60.	64.	67.	60.	52.	SNR	
10.0	22.9	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	62.	28.	45.	50.	56.	59.	62.	64.	59.	50.	36.	SNR	
14.0	26.1	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	69.	26.	40.	51.	58.	64.	67.	69.	70.	62.	55.	SNR	
18.0	18.9	14.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	66.	37.	46.	54.	62.	67.	68.	58.	45.	26.	3.	SNR	
22.0	20.9	17.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	66.	-7.	35.	53.	61.	63.	67.	68.	52.	36.	20.	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -23.67, 135.83													
2.0	19.1	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	65.	****	-49.	18.	53.	61.	62.	46.	47.	46.	42.	SNR	
6.0	18.3	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	64.	-48.	18.	44.	61.	64.	68.	58.	43.	22.	-2.	SNR	
10.0	16.5	13.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	65.	47.	55.	60.	64.	66.	61.	49.	28.	4.	-10.	SNR	
14.0	18.0	14.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	70.	41.	53.	61.	67.	70.	67.	60.	46.	26.	5.	SNR	
18.0	13.4	10.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	65.	50.	56.	63.	68.	61.	46.	22.	-3.	-10.	-10.	SNR	
22.0	15.5	13.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	68.	-3.	48.	61.	67.	70.	58.	47.	38.	21.	-8.	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -17.30, 123.63													
2.0	26.2	22.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	56.	****	****	-33.	14.	29.	14.	53.	58.	53.	41.	SNR	
6.0	28.9	23.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	61.	****	-73.	-2.	30.	40.	54.	58.	61.	64.	56.	SNR	
10.0	25.8	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ



65.	63.	17.	36.	46.	53.	57.	60.	64.	66.	57.	47.	SNR
14.0	28.9	23.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
65.	67.	26.	38.	49.	57.	62.	65.	67.	68.	67.	59.	SNR
18.0	21.2	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
60.	65.	25.	42.	53.	60.	64.	66.	65.	52.	38.	19.	SNR
22.0	23.5	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
65.	64.	-56.	18.	37.	53.	59.	62.	64.	57.	46.	26.	SNR
TX LOCATION = -19.33, 146.83												
RX LOCATION = -2.47, 140.63												
2.0	25.8	23.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
65.	61.	****	****	-16.	25.	40.	51.	58.	62.	56.	47.	SNR
6.0	27.4	23.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	66.	****	15.	39.	52.	58.	61.	64.	66.	68.	57.	SNR
10.0	24.2	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
66.	64.	33.	47.	54.	59.	61.	63.	65.	67.	57.	49.	SNR
14.0	27.4	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	69.	28.	45.	55.	62.	66.	68.	69.	69.	68.	59.	SNR
18.0	19.8	15.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
67.	67.	39.	50.	58.	63.	66.	67.	59.	48.	29.	6.	SNR
22.0	22.0	19.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	66.	-65.	32.	52.	61.	62.	65.	67.	52.	28.	-7.	SNR
TX LOCATION = -19.33, 146.83												
RX LOCATION = 13.45, 144.75												
2.0	30.3	27.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
50.	53.	****	****	-57.	-6.	20.	32.	15.	48.	53.	55.	SNR
6.0	33.0	28.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
55.	61.	****	-8.	25.	37.	44.	49.	55.	59.	61.	62.	SNR
10.0	30.3	23.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
57.	61.	22.	43.	49.	51.	53.	55.	58.	62.	63.	61.	SNR
14.0	32.0	25.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
57.	64.	16.	44.	51.	55.	58.	63.	65.	64.	64.	63.	SNR
18.0	24.0	19.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
55.	63.	25.	44.	53.	57.	59.	63.	62.	55.	45.	28.	SNR
22.0	29.0	24.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
54.	61.	****	5.	33.	45.	54.	59.	59.	61.	61.	50.	SNR
TX LOCATION = -19.33, 146.83												
RX LOCATION = 14.67, 121.05												
2.0	29.5	26.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
45.	50.	****	****	-60.	-8.	17.	29.	40.	11.	50.	44.	SNR
6.0	32.8	27.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
51.	21.	****	-74.	-1.	21.	32.	39.	48.	39.	27.	57.	SNR
10.0	30.6	23.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
56.	38.	3.	38.	45.	47.	48.	48.	50.	38.	23.	57.	SNR
14.0	30.8	24.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
56.	41.	21.	44.	49.	52.	54.	56.	58.	44.	29.	57.	SNR
18.0	21.3	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
52.	59.	20.	44.	54.	60.	61.	59.	54.	28.	42.	-49.	SNR
22.0	21.7	18.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
52.	54.	****	2.	28.	44.	51.	54.	55.	15.	-51.	****	SNR
TX LOCATION = -19.33, 146.83												
RX LOCATION = 17.22, 100.62												
2.0	27.4	24.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
41.	37.	****	****	-88.	-34.	0.	16.	29.	36.	41.	16.	SNR
6.0	25.7	21.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ

32.	36.	****	****	-76.	-22.	5.	23.	33.	40.	27.	12.	SNR	
10.0	24.8	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	47.	-41.	24.	36.	41.	43.	46.	49.	49.	31.	36.	SNR	
14.0	23.6	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	54.	9.	36.	43.	47.	50.	53.	54.	39.	24.	2.	SNR	
18.0	26.5	20.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	57.	3.	36.	47.	53.	57.	58.	57.	54.	37.	17.	SNR	
22.0	21.9	18.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
34.	51.	****	-12.	24.	40.	48.	51.	48.	5.	-73.	****	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -12.20, 96.90													
2.0	24.7	21.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	34.	****	****	-85.	-26.	6.	26.	33.	40.	16.	35.	SNR	
6.0	30.2	24.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	39.	****	****	-93.	-31.	2.	23.	32.	38.	43.	43.	SNR	
10.0	27.4	21.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	55.	-48.	8.	28.	39.	47.	52.	55.	56.	52.	28.	SNR	
14.0	30.1	24.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	58.	10.	30.	42.	49.	54.	57.	59.	58.	57.	49.	SNR	
18.0	22.7	17.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	57.	28.	36.	48.	54.	56.	57.	54.	36.	15.	-18.	SNR	
22.0	21.7	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	51.	-85.	-3.	25.	40.	47.	50.	51.	22.	-16.	-72.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -34.87, 138.50													
2.0	23.4	20.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	58.	****	****	-13.	25.	22.	55.	59.	35.	-6.	-33.	SNR	
6.0	22.9	18.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	56.	****	-82.	-1.	31.	38.	55.	61.	53.	41.	19.	SNR	
10.0	21.9	18.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	16.	38.	48.	55.	59.	63.	65.	50.	28.	-5.	SNR	
14.0	22.6	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	66.	35.	44.	54.	61.	64.	66.	66.	56.	45.	27.	SNR	
18.0	17.5	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	64.	38.	49.	57.	62.	65.	58.	46.	25.	-2.	-31.	SNR	
22.0	20.0	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	62.	-48.	26.	42.	56.	60.	63.	55.	39.	12.	-21.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -12.33, 130.83													
2.0	15.5	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	62.	****	-23.	47.	59.	64.	41.	40.	33.	16.	-18.	SNR	
6.0	17.9	15.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	62.	-96.	3.	48.	58.	62.	61.	58.	49.	35.	19.	SNR	
10.0	16.1	12.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	62.	35.	52.	58.	62.	63.	58.	50.	37.	21.	5.	SNR	
14.0	17.7	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	67.	36.	51.	58.	64.	68.	66.	62.	53.	39.	24.	SNR	
18.0	13.5	10.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	64.	44.	54.	61.	66.	62.	49.	28.	5.	2.	2.	SNR	
22.0	13.2	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	69.	35.	59.	65.	69.	57.	36.	11.	-2.	-1.	-1.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -23.67, 135.83													
2.0	20.4	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

49.	62.	****	-43.	20.	52.	61.	62.	46.	47.	46.	42.	SNR	
6.0	19.7	16.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	62.	****	-13.	28.	53.	60.	65.	60.	50.	33.	14.	SNR	
10.0	18.1	14.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	64.	37.	53.	57.	61.	65.	67.	56.	40.	17.	-7.	SNR	
14.0	19.7	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	70.	39.	50.	59.	65.	69.	71.	63.	54.	38.	18.	SNR	
18.0	15.0	11.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	67.	45.	55.	62.	67.	65.	56.	37.	13.	-11.	-18.	SNR	
22.0	16.0	13.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	67.	17.	52.	62.	65.	69.	58.	45.	33.	15.	-18.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -19.33, 146.83													
2.0	26.2	22.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	56.	****	****	-32.	13.	29.	14.	53.	58.	53.	41.	SNR	
6.0	28.9	23.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	60.	****	-74.	-4.	28.	38.	52.	57.	61.	64.	56.	SNR	
10.0	25.8	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	11.	32.	44.	52.	57.	61.	64.	66.	57.	47.	SNR	
14.0	28.9	23.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	68.	23.	36.	48.	57.	63.	66.	67.	68.	67.	59.	SNR	
18.0	21.2	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	65.	29.	44.	54.	60.	64.	66.	65.	52.	38.	19.	SNR	
22.0	23.5	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	-55.	21.	39.	54.	59.	62.	64.	57.	46.	26.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -2.47, 140.63													
2.0	27.1	24.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	57.	****	****	-23.	18.	33.	49.	52.	57.	61.	48.	SNR	
6.0	31.3	26.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	63.	****	-88.	3.	32.	42.	53.	57.	61.	63.	65.	SNR	
10.0	27.8	21.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	8.	36.	47.	54.	57.	60.	63.	65.	65.	57.	SNR	
14.0	31.2	24.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	68.	20.	38.	50.	57.	63.	66.	66.	67.	68.	67.	SNR	
18.0	23.3	18.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	66.	28.	44.	54.	61.	64.	66.	66.	59.	49.	34.	SNR	
22.0	23.9	20.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	65.	-34.	32.	50.	57.	61.	63.	65.	58.	41.	10.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = 13.45, 144.75													
2.0	29.4	26.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	51.	****	****	-53.	-3.	20.	32.	17.	47.	52.	47.	SNR	
6.0	33.2	28.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	58.	****	-47.	3.	22.	32.	42.	46.	54.	57.	59.	SNR	
10.0	30.7	23.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	60.	9.	37.	46.	49.	49.	50.	57.	60.	61.	59.	SNR	
14.0	31.6	25.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	38.	13.	44.	50.	54.	57.	59.	60.	44.	63.	61.	SNR	
18.0	26.5	20.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	37.	27.	45.	53.	58.	59.	59.	37.	7.	53.	43.	SNR	
22.0	28.0	24.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	-14.	-83.	20.	40.	48.	54.	56.	37.	-13.	58.	42.	SNR	
TX LOCATION = -17.30, 123.63													

RX LOCATION = 14.67, 121.05

2.0	27.1	24.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	54.	****	-85.	-18.	16.	30.	43.	4.	54.	56.	42.	SNR	
6.0	31.0	26.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	56.	****	-83.	-1.	19.	30.	41.	48.	53.	57.	58.	SNR	
10.0	29.3	22.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	58.	0.	39.	46.	50.	51.	53.	55.	60.	62.	56.	SNR	
14.0	29.7	23.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	64.	24.	44.	52.	55.	58.	62.	63.	64.	64.	57.	SNR	
18.0	26.8	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	64.	25.	49.	57.	62.	65.	65.	64.	63.	56.	46.	SNR	
22.0	23.9	20.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	62.	-17.	31.	45.	55.	60.	61.	62.	53.	32.	-7.	SNR	

TX LOCATION = -17.30, 123.63

RX LOCATION = 17.22, 100.62

2.0	29.6	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	-23.	****	-98.	-24.	10.	26.	36.	43.	3.	55.	47.	SNR	
6.0	31.5	28.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	52.	****	****	-69.	-16.	11.	24.	36.	46.	51.	53.	SNR	
10.0	31.1	26.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	61.	-45.	22.	38.	41.	44.	46.	50.	35.	61.	59.	SNR	
14.0	30.3	23.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	37.	22.	40.	45.	48.	51.	53.	53.	35.	17.	57.	SNR	
18.0	22.4	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	58.	13.	40.	49.	55.	58.	58.	56.	36.	17.	34.	SNR	
22.0	17.8	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	52.	-3.	25.	40.	49.	53.	38.	11.	-37.	****	****	SNR	

TX LOCATION = -17.30, 123.63

RX LOCATION = -12.20, 96.90

2.0	25.9	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	58.	****	****	6.	34.	44.	38.	56.	60.	52.	42.	SNR	
6.0	32.9	28.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	57.	****	****	-30.	13.	30.	40.	51.	52.	56.	59.	SNR	
10.0	30.9	25.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	65.	-26.	33.	48.	54.	59.	62.	62.	64.	65.	64.	SNR	
14.0	31.8	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	66.	34.	50.	57.	62.	66.	66.	67.	66.	66.	65.	SNR	
18.0	25.9	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	66.	35.	51.	60.	65.	66.	65.	66.	65.	56.	47.	SNR	
22.0	22.2	17.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	62.	11.	42.	54.	60.	61.	63.	63.	52.	40.	21.	SNR	

TX LOCATION = -2.47, 140.63

RX LOCATION = -34.87, 138.50

2.0	33.6	28.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	54.	****	****	****	-14.	17.	29.	38.	24.	51.	55.	SNR	
6.0	35.6	30.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	60.	****	-57.	-6.	22.	36.	44.	54.	57.	59.	60.	SNR	
10.0	31.3	24.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	63.	19.	35.	44.	51.	57.	61.	63.	63.	63.	62.	SNR	
14.0	34.7	27.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	22.	37.	47.	54.	58.	64.	65.	65.	65.	64.	SNR	
18.0	25.5	20.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	63.	32.	43.	54.	59.	62.	63.	63.	61.	52.	41.	SNR	
22.0	29.1	25.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	54.	61.	-99.	-3.	29.	42.	53.	58.	59.	61.	61.	51.	SNR
TX LOCATION	= -2.47, 140.63												
RX LOCATION	= -12.33, 130.83												
2.0	21.9	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	62.	****	-83.	15.	45.	53.	60.	58.	21.	-36.	****	SNR
6.0	22.8	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	63.	-83.	20.	46.	51.	59.	61.	66.	61.	55.	44.	SNR
10.0	20.5	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	59.	61.	31.	50.	56.	59.	60.	62.	59.	54.	46.	32.	SNR
14.0	22.5	18.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	69.	68.	33.	49.	57.	63.	66.	68.	69.	63.	56.	46.	SNR
18.0	17.0	13.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	66.	40.	52.	59.	63.	67.	61.	50.	30.	5.	-19.	SNR
22.0	17.8	15.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	66.	7.	48.	60.	63.	66.	62.	42.	6.	-30.	-30.	SNR
TX LOCATION	= -2.47, 140.63												
RX LOCATION	= -23.67, 135.83												
2.0	28.2	25.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	62.	58.	****	****	-34.	13.	29.	47.	51.	56.	60.	51.	SNR
6.0	31.0	26.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	64.	****	-51.	7.	35.	44.	57.	59.	62.	65.	66.	SNR
10.0	27.2	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	65.	23.	40.	50.	55.	59.	63.	65.	67.	66.	56.	SNR
14.0	31.1	24.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	68.	28.	42.	53.	60.	64.	67.	67.	68.	68.	67.	SNR
18.0	22.5	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	60.	66.	32.	47.	55.	62.	65.	66.	66.	57.	45.	28.	SNR
22.0	24.4	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	64.	-62.	22.	41.	54.	60.	62.	64.	65.	46.	20.	SNR
TX LOCATION	= -2.47, 140.63												
RX LOCATION	= -19.33, 146.83												
2.0	25.8	23.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	61.	****	****	-16.	25.	40.	51.	57.	62.	56.	47.	SNR
6.0	27.4	23.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	66.	****	14.	39.	51.	57.	60.	63.	66.	68.	57.	SNR
10.0	24.2	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	65.	35.	48.	55.	60.	63.	64.	67.	68.	58.	49.	SNR
14.0	27.4	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	69.	31.	47.	56.	63.	67.	68.	69.	69.	69.	59.	SNR
18.0	19.8	15.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	67.	43.	53.	59.	64.	66.	68.	59.	48.	29.	6.	SNR
22.0	22.0	19.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	66.	-65.	33.	53.	61.	62.	65.	67.	52.	28.	-7.	SNR
TX LOCATION	= -2.47, 140.63												
RX LOCATION	= -17.30, 123.63												
2.0	27.1	24.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	61.	58.	****	****	-22.	19.	34.	49.	52.	57.	61.	48.	SNR
6.0	31.3	26.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	63.	****	-88.	5.	33.	44.	55.	58.	61.	63.	65.	SNR
10.0	27.8	21.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	65.	18.	42.	51.	55.	59.	61.	64.	66.	66.	57.	SNR
14.0	31.2	24.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	68.	28.	44.	53.	60.	64.	66.	67.	68.	68.	67.	SNR
18.0	23.3	18.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

65.	66.	30.	46.	55.	62.	65.	66.	66.	59.	49.	34.	SNR	
22.0	23.9	20.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	65.	-34.	30.	49.	57.	62.	63.	65.	58.	41.	10.	SNR	
TX LOCATION = -2.47, 140.63													
RX LOCATION = 13.45, 144.75													
2.0	23.2	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	59.	****	-81.	5.	42.	46.	63.	58.	52.	57.	60.	SNR	
6.0	20.4	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	65.	-32.	28.	52.	59.	59.	65.	64.	64.	64.	58.	SNR	
10.0	17.7	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	56.	42.	54.	56.	56.	56.	52.	46.	33.	12.	-11.	SNR	
14.0	19.1	15.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	64.	40.	54.	58.	60.	63.	66.	56.	40.	15.	-13.	SNR	
18.0	17.5	13.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	42.	54.	60.	63.	66.	60.	51.	34.	12.	-13.	SNR	
22.0	22.3	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
75.	74.	6.	45.	59.	65.	65.	72.	74.	63.	46.	10.	SNR	
TX LOCATION = -2.47, 140.63													
RX LOCATION = 14.67, 121.05													
2.0	24.9	22.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	57.	****	****	-13.	27.	40.	45.	54.	62.	53.	34.	SNR	
6.0	25.3	22.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	62.	****	-27.	25.	42.	48.	44.	57.	66.	56.	41.	SNR	
10.0	22.6	19.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	55.	27.	47.	52.	52.	52.	54.	57.	52.	44.	27.	SNR	
14.0	22.8	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	62.	36.	51.	55.	56.	58.	61.	64.	54.	40.	17.	SNR	
18.0	24.3	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	65.	32.	51.	60.	65.	66.	65.	65.	62.	51.	39.	SNR	
22.0	25.6	22.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	-24.	24.	42.	54.	59.	60.	64.	65.	51.	30.	SNR	
TX LOCATION = -2.47, 140.63													
RX LOCATION = 17.22, 100.62													
2.0	31.6	28.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	52.	****	****	-51.	1.	22.	35.	41.	8.	-13.	53.	SNR	
6.0	30.9	27.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	-13.	****	****	-29.	3.	21.	29.	41.	27.	-5.	53.	SNR	
10.0	28.1	23.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	27.	-2.	37.	45.	48.	48.	49.	40.	24.	58.	49.	SNR	
14.0	20.3	16.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	54.	25.	44.	49.	51.	53.	55.	40.	13.	20.	-91.	SNR	
18.0	22.8	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	59.	13.	42.	52.	58.	60.	59.	57.	38.	19.	-10.	SNR	
22.0	18.7	16.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	55.	-37.	9.	35.	48.	52.	55.	9.	-70.	****	****	SNR	
TX LOCATION = -2.47, 140.63													
RX LOCATION = -12.20, 96.90													
2.0	34.1	30.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	40.	****	****	-58.	-1.	20.	34.	39.	45.	23.	-5.	SNR	
6.0	40.8	34.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	22.	****	****	-66.	-10.	17.	31.	38.	42.	47.	49.	SNR	
10.0	36.2	28.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	44.	-28.	28.	43.	50.	55.	58.	59.	58.	55.	37.	SNR	
14.0	29.5	23.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

54.	61.	24.	46.	53.	58.	61.	63.	62.	61.	60.	46.	SNR	
18.0	23.4	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	60.	29.	47.	56.	60.	62.	60.	59.	44.	25.	54.	SNR	
22.0	21.2	18.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	56.	-36.	21.	41.	51.	56.	56.	54.	7.	51.	****	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -34.87, 138.50													
2.0	29.9	26.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	39.	****	****	****	-45.	-6.	11.	28.	33.	39.	45.	SNR	
6.0	31.8	27.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	52.	****	****	-32.	6.	28.	41.	47.	51.	52.	53.	SNR	
10.0	27.9	21.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	57.	8.	30.	38.	46.	52.	56.	57.	57.	54.	35.	SNR	
14.0	29.0	24.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	59.	11.	39.	49.	55.	58.	60.	60.	59.	58.	39.	SNR	
18.0	22.0	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	57.	16.	35.	48.	55.	57.	56.	52.	32.	9.	-23.	SNR	
22.0	25.0	22.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	50.	****	-45.	3.	23.	38.	45.	47.	53.	22.	-21.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -12.33, 130.83													
2.0	25.3	22.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	45.	****	****	-40.	6.	22.	11.	38.	48.	43.	24.	SNR	
6.0	28.6	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	58.	****	-29.	13.	35.	44.	50.	49.	55.	60.	51.	SNR	
10.0	26.6	22.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	60.	14.	39.	49.	54.	56.	57.	59.	61.	56.	48.	SNR	
14.0	28.0	23.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	65.	20.	41.	51.	57.	61.	64.	64.	65.	64.	52.	SNR	
18.0	24.3	18.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	64.	28.	44.	53.	59.	63.	63.	63.	60.	49.	37.	SNR	
22.0	27.0	24.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	62.	-53.	13.	38.	50.	53.	59.	58.	62.	55.	40.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -23.67, 135.83													
2.0	33.0	29.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	47.	****	****	-83.	-22.	9.	26.	32.	36.	41.	47.	SNR	
6.0	36.1	32.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	59.	****	-62.	-5.	20.	35.	44.	48.	54.	35.	58.	SNR	
10.0	32.7	27.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	63.	14.	38.	46.	51.	54.	57.	58.	45.	63.	62.	SNR	
14.0	34.4	28.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	25.	21.	42.	50.	56.	60.	61.	61.	60.	36.	11.	SNR	
18.0	26.2	19.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	43.	26.	40.	50.	56.	58.	57.	37.	14.	52.	43.	SNR	
22.0	29.8	26.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	-26.	****	-5.	26.	40.	48.	50.	56.	18.	-36.	52.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -19.33, 146.83													
2.0	30.3	27.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	48.	****	****	-67.	-10.	17.	28.	15.	38.	47.	53.	SNR	
6.0	33.0	29.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	61.	****	-25.	16.	36.	45.	51.	56.	54.	59.	61.	SNR	
10.0	30.3	25.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

57.	64.	20.	41.	50.	55.	59.	61.	62.	63.	64.	61.	SNR	
14.0	32.0	26.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	18.	43.	51.	58.	61.	65.	66.	65.	65.	63.	SNR	
18.0	24.0	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	26.	44.	52.	57.	58.	62.	62.	55.	47.	34.	SNR	
22.0	29.0	25.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	60.	****	-8.	27.	44.	52.	56.	54.	58.	61.	50.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -17.30, 123.63													
2.0	29.4	26.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	45.	****	****	-63.	-9.	16.	26.	18.	39.	46.	43.	SNR	
6.0	33.2	29.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	56.	****	-62.	-9.	19.	36.	45.	48.	49.	53.	56.	SNR	
10.0	30.7	25.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	63.	10.	37.	48.	53.	54.	55.	61.	62.	63.	60.	SNR	
14.0	31.6	26.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	23.	13.	42.	51.	57.	60.	60.	61.	41.	63.	61.	SNR	
18.0	26.5	20.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	43.	25.	43.	52.	58.	59.	58.	39.	16.	53.	45.	SNR	
22.0	28.0	24.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	-14.	-81.	18.	40.	51.	55.	56.	37.	-13.	58.	42.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -2.47, 140.63													
2.0	23.2	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	60.	****	-81.	5.	44.	49.	65.	59.	52.	57.	60.	SNR	
6.0	20.4	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
73.	70.	-28.	29.	54.	62.	64.	70.	67.	65.	64.	58.	SNR	
10.0	17.7	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	60.	37.	50.	56.	58.	60.	56.	49.	33.	12.	-11.	SNR	
14.0	19.1	15.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	35.	49.	56.	61.	64.	67.	56.	40.	15.	-13.	SNR	
18.0	17.5	13.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	41.	51.	58.	62.	66.	60.	51.	34.	12.	-13.	SNR	
22.0	22.3	19.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
75.	74.	8.	45.	60.	67.	66.	72.	74.	63.	46.	10.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = 14.67, 121.05													
2.0	30.6	27.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	62.	****	-53.	8.	29.	44.	51.	54.	58.	61.	64.	SNR	
6.0	30.5	27.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	****	7.	35.	45.	50.	54.	57.	62.	65.	66.	SNR	
10.0	29.0	24.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	36.	51.	54.	55.	56.	57.	59.	64.	67.	59.	SNR	
14.0	30.5	25.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	68.	27.	46.	54.	57.	61.	65.	66.	68.	68.	67.	SNR	
18.0	22.2	16.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	66.	32.	50.	60.	65.	65.	66.	65.	54.	42.	26.	SNR	
22.0	25.0	22.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	66.	-5.	37.	50.	59.	64.	64.	66.	66.	50.	27.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = 17.22, 100.62													
2.0	43.7	39.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	-36.	****	****	-45.	1.	23.	37.	45.	49.	51.	54.	SNR	
6.0	41.7	37.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ



54.	-9.	****	-77.	-13.	14.	26.	37.	45.	51.	53.	55.	SNR	
10.0	40.5	34.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	31.	6.	39.	47.	49.	51.	53.	56.	59.	60.	58.	SNR	
14.0	32.2	26.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	61.	12.	34.	45.	51.	55.	59.	62.	62.	61.	60.	SNR	
18.0	23.5	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	60.	18.	40.	51.	58.	60.	60.	58.	42.	24.	-1.	SNR	
22.0	17.3	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	55.	-16.	25.	43.	51.	55.	33.	-41.	****	****	****	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -12.20, 96.90													
2.0	24.6	22.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	28.	****	****	-78.	-19.	9.	23.	23.	37.	13.	-33.	SNR	
6.0	25.4	22.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	32.	****	****	-67.	-20.	5.	20.	26.	37.	22.	-7.	SNR	
10.0	23.3	19.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
43.	54.	-24.	24.	39.	46.	51.	54.	55.	40.	20.	-10.	SNR	
14.0	23.2	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	57.	12.	39.	49.	55.	57.	58.	57.	38.	12.	-29.	SNR	
18.0	25.1	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	58.	18.	39.	52.	57.	59.	58.	56.	51.	32.	11.	SNR	
22.0	21.6	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	54.	-45.	15.	35.	47.	52.	53.	53.	10.	-56.	****	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -34.87, 138.50													
2.0	24.9	22.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	24.	****	****	****	-37.	-3.	14.	17.	32.	14.	-28.	SNR	
6.0	31.9	27.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
36.	47.	****	****	-95.	-15.	13.	27.	39.	44.	47.	49.	SNR	
10.0	28.6	22.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	57.	-11.	23.	33.	43.	50.	55.	57.	56.	54.	37.	SNR	
14.0	27.9	23.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	58.	17.	39.	49.	55.	58.	59.	59.	58.	55.	32.	SNR	
18.0	24.3	18.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	57.	10.	39.	49.	55.	58.	58.	56.	48.	28.	7.	SNR	
22.0	23.0	20.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	53.	****	-13.	18.	36.	46.	51.	53.	28.	-17.	-91.	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -12.33, 130.83													
2.0	24.5	22.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	47.	****	****	-21.	17.	32.	36.	44.	53.	40.	16.	SNR	
6.0	27.0	24.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	52.	****	-59.	-2.	23.	36.	46.	45.	52.	58.	43.	SNR	
10.0	25.9	21.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	59.	0.	33.	46.	52.	54.	55.	59.	61.	54.	46.	SNR	
14.0	26.1	21.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	64.	25.	43.	51.	57.	61.	62.	64.	64.	55.	44.	SNR	
18.0	25.6	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	64.	26.	45.	53.	60.	64.	64.	64.	63.	54.	45.	SNR	
22.0	23.8	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	63.	-12.	32.	47.	56.	61.	61.	63.	54.	35.	2.	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -23.67, 135.83													
2.0	30.5	27.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

43.	45.	****	****	-68.	-13.	11.	19.	37.	9.	44.	47.	SNR	
6.0	34.9	31.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	53.	****	****	-32.	1.	21.	34.	40.	46.	27.	-3.	SNR	
10.0	32.2	27.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	27.	-15.	26.	40.	47.	52.	55.	57.	44.	27.	60.	SNR	
14.0	32.6	27.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	29.	23.	41.	49.	56.	60.	61.	60.	56.	29.	-2.	SNR	
18.0	21.2	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	59.	23.	42.	51.	57.	59.	59.	53.	31.	8.	-25.	SNR	
22.0	20.3	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	55.	-70.	15.	34.	46.	52.	55.	36.	-9.	-6.	****	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -19.33, 146.83													
2.0	29.5	26.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	42.	****	****	-72.	-14.	10.	19.	38.	0.	42.	39.	SNR	
6.0	32.8	29.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	-13.	****	-94.	-18.	11.	30.	39.	43.	38.	16.	53.	SNR	
10.0	30.6	25.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	29.	-9.	29.	42.	50.	54.	55.	57.	39.	18.	58.	SNR	
14.0	30.8	25.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	31.	17.	40.	49.	55.	60.	60.	60.	42.	18.	57.	SNR	
18.0	21.3	16.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	59.	15.	42.	51.	57.	60.	58.	54.	32.	43.	-26.	SNR	
22.0	21.7	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	55.	****	0.	29.	45.	51.	53.	56.	17.	-41.	****	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -17.30, 123.63													
2.0	27.1	24.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	49.	****	****	-28.	13.	23.	41.	-3.	48.	54.	37.	SNR	
6.0	31.0	27.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	53.	****	-99.	-16.	12.	30.	40.	49.	47.	52.	56.	SNR	
10.0	29.3	24.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	63.	-3.	35.	44.	51.	56.	58.	60.	63.	63.	56.	SNR	
14.0	29.7	23.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	64.	28.	45.	53.	59.	63.	65.	64.	64.	63.	56.	SNR	
18.0	26.8	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	64.	29.	46.	55.	60.	64.	65.	64.	63.	56.	46.	SNR	
22.0	23.9	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	62.	-8.	32.	48.	57.	60.	60.	62.	53.	34.	-1.	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -2.47, 140.63													
2.0	24.9	22.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	59.	****	****	-8.	30.	45.	46.	54.	64.	53.	34.	SNR	
6.0	25.3	22.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	59.	****	-28.	17.	41.	51.	48.	54.	64.	56.	41.	SNR	
10.0	22.6	19.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	60.	16.	40.	50.	54.	56.	59.	61.	54.	44.	27.	SNR	
14.0	22.8	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	64.	25.	43.	53.	58.	62.	64.	65.	54.	40.	17.	SNR	
18.0	24.3	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	65.	27.	46.	55.	61.	65.	65.	65.	62.	51.	39.	SNR	
22.0	25.6	22.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	-13.	33.	49.	57.	61.	62.	64.	65.	51.	30.	SNR	
TX LOCATION = 14.67, 121.05													

RX LOCATION = 13.45, 144.75

2.0	30.6	27.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	62.	****	-52.	9.	28.	43.	50.	54.	58.	61.	64.	64.	SNR
6.0	30.5	27.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	****	5.	31.	43.	49.	53.	56.	62.	65.	66.	66.	SNR
10.0	29.0	24.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	66.	32.	49.	53.	54.	56.	58.	61.	65.	67.	59.	59.	SNR
14.0	30.5	25.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	68.	25.	46.	54.	58.	63.	67.	67.	68.	68.	67.	67.	SNR
18.0	22.2	16.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	65.	31.	49.	58.	63.	64.	66.	65.	54.	42.	26.	26.	SNR
22.0	25.0	22.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	66.	4.	44.	55.	60.	63.	64.	66.	66.	50.	27.	27.	SNR

TX LOCATION = 14.67, 121.05

RX LOCATION = 17.22, 100.62

2.0	34.0	30.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	67.	****	5.	30.	49.	56.	59.	63.	64.	66.	67.	67.	SNR
6.0	28.0	25.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	63.	****	-37.	15.	39.	46.	52.	58.	62.	64.	53.	53.	SNR
10.0	29.1	25.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	68.	25.	54.	55.	56.	57.	59.	63.	67.	69.	60.	60.	SNR
14.0	31.2	25.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	69.	38.	50.	55.	58.	61.	65.	67.	69.	69.	69.	69.	SNR
18.0	25.8	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	68.	37.	50.	59.	64.	67.	68.	68.	68.	59.	54.	54.	SNR
22.0	14.6	10.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	59.	34.	50.	56.	61.	57.	50.	37.	18.	-4.	-27.	-27.	SNR

TX LOCATION = 14.67, 121.05

RX LOCATION = -12.20, 96.90

2.0	28.5	25.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	57.	****	-61.	0.	26.	39.	45.	52.	55.	58.	46.	46.	SNR
6.0	31.0	27.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	48.	****	****	-58.	-12.	14.	26.	39.	40.	46.	52.	52.	SNR
10.0	30.8	27.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	-23.	26.	38.	47.	53.	58.	61.	61.	62.	61.	61.	SNR
14.0	30.3	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	64.	35.	49.	54.	57.	59.	64.	64.	64.	63.	60.	60.	SNR
18.0	29.0	24.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	19.	32.	48.	56.	60.	61.	60.	45.	20.	62.	52.	52.	SNR
22.0	22.4	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	39.	15.	40.	49.	54.	54.	32.	57.	48.	36.	17.	17.	SNR

TX LOCATION = 17.22, 100.62

RX LOCATION = -34.87, 138.50

2.0	28.3	25.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	40.	****	****	****	-43.	-7.	16.	26.	37.	42.	19.	19.	SNR
6.0	32.3	27.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
29.	39.	****	****	****	-61.	-19.	7.	20.	34.	38.	41.	41.	SNR
10.0	29.6	23.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	54.	-62.	-1.	18.	34.	44.	50.	53.	54.	52.	36.	36.	SNR
14.0	27.8	23.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	56.	3.	35.	45.	52.	55.	57.	57.	56.	51.	29.	29.	SNR
18.0	24.3	19.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	56.	17.	30.	46.	53.	56.	56.	54.	45.	22.	-7.	-7.	SNR
22.0	21.8	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

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    33. 48. -95. -7. 21. 34. 47. 48. 41. 19. -8. -48. SNR
TX LOCATION = 17.22, 100.62
RX LOCATION = -12.33, 130.83
    2.0 29.5 26.2 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    48. 52. **** -43. 2. 25. 35. 42. 49. 53. 46. SNR
    6.0 30.1 27.1 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    45. 48. **** -66. -14. 11. 23. 36. 42. 47. 46. SNR
   10.0 29.3 26.1 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    53. 59. -46. 11. 30. 35. 42. 46. 48. 16. 59. 51. SNR
   14.0 27.8 23.3 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    56. 24. 4. 30. 41. 47. 52. 55. 39. 19. 58. 48. SNR
   18.0 22.6 18.7 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    51. 58. 5. 29. 44. 52. 56. 58. 57. 33. 3. -45. SNR
   22.0 18.5 14.0 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    45. 51. -6. 25. 41. 49. 52. 48. 22. -9. -54. **** SNR
TX LOCATION = 17.22, 100.62
RX LOCATION = -23.67, 135.83
    2.0 24.6 21.9 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    41. 30. **** -67. -27. 3. 20. 26. 39. 12. 20. SNR
    6.0 25.0 22.5 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    28. 29. **** -96. -34. -3. 16. 23. 35. 14. -25. SNR
   10.0 25.0 22.2 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    50. 53. -44. 10. 22. 32. 42. 48. 51. 54. 28. -6. SNR
   14.0 24.5 20.6 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    42. 57. 6. 34. 44. 51. 55. 57. 57. 52. 28. 2. SNR
   18.0 25.7 21.3 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    41. 58. -1. 31. 47. 54. 57. 58. 58. 56. 32. 5. SNR
   22.0 20.6 15.7 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    41. 50. -50. 8. 34. 45. 50. 50. 34. 13. -20. -66. SNR
TX LOCATION = 17.22, 100.62
RX LOCATION = -19.33, 146.83
    2.0 27.4 24.4 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    40. 35. **** -93. -38. -4. 14. 27. 33. 41. 11. SNR
    6.0 25.7 23.1 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    30. 34. **** -84. -27. 2. 19. 26. 37. 22. -12. SNR
   10.0 24.8 22.1 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    48. 53. -54. 12. 23. 35. 43. 49. 52. 53. 25. 33. SNR
   14.0 23.6 19.8 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    41. 56. -6. 25. 40. 48. 54. 56. 56. 39. 18. -14. SNR
   18.0 26.5 22.0 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    39. 57. 3. 24. 41. 51. 56. 58. 58. 56. 36. 11. SNR
   22.0 21.9 16.6 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    34. 49. -87. -2. 29. 42. 47. 48. 43. 22. -5. -44. SNR
TX LOCATION = 17.22, 100.62
RX LOCATION = -17.30, 123.63
    2.0 29.6 26.4 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    47. 50. **** -37. -1. 21. 29. 43. 6. 51. 46. SNR
    6.0 31.5 28.3 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    44. 47. **** -80. -24. 4. 17. 32. 38. 44. 49. SNR
   10.0 31.1 27.6 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    54. 60. -53. 12. 32. 33. 42. 47. 52. 31. 60. 59. SNR
   14.0 30.3 25.4 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    57. 24. 16. 35. 44. 50. 54. 56. 56. 34. 11. 57. SNR
   18.0 22.4 18.6 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ

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52.	58.	9.	33.	46.	53.	57.	58.	57.	33.	2.	17.	SNR	
22.0	17.8	13.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	51.	7.	26.	42.	50.	52.	38.	17.	-19.	-68.	****	SNR	
TX LOCATION = 17.22, 100.62													
RX LOCATION = -2.47, 140.63													
2.0	31.6	28.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	50.	****	****	-54.	0.	21.	33.	38.	8.	-13.	50.	SNR	
6.0	30.9	27.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	-14.	****	****	-39.	-8.	16.	15.	24.	26.	-6.	45.	SNR	
10.0	28.1	23.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	27.	-24.	19.	35.	44.	49.	51.	41.	24.	57.	49.	SNR	
14.0	20.3	16.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	56.	12.	35.	44.	52.	56.	57.	41.	13.	20.	-91.	SNR	
18.0	22.8	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	59.	7.	33.	46.	55.	59.	59.	59.	36.	4.	-44.	SNR	
22.0	18.7	14.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	52.	-18.	28.	44.	50.	52.	50.	26.	-4.	-48.	****	SNR	
TX LOCATION = 17.22, 100.62													
RX LOCATION = 13.45, 144.75													
2.0	43.7	38.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	-38.	****	****	-43.	2.	21.	36.	45.	50.	51.	54.	SNR	
6.0	41.7	37.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	-15.	****	-78.	-16.	11.	24.	35.	43.	51.	53.	55.	SNR	
10.0	40.5	33.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	33.	-4.	32.	41.	45.	48.	51.	55.	59.	60.	57.	SNR	
14.0	32.2	25.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	61.	4.	34.	45.	51.	56.	60.	62.	62.	61.	59.	SNR	
18.0	23.5	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	59.	15.	38.	49.	56.	59.	58.	56.	42.	31.	16.	SNR	
22.0	17.3	12.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	49.	-3.	34.	45.	49.	50.	38.	24.	2.	-28.	-65.	SNR	
TX LOCATION = 17.22, 100.62													
RX LOCATION = 14.67, 121.05													
2.0	34.0	30.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	67.	****	6.	32.	49.	55.	59.	63.	64.	66.	67.	SNR	
6.0	28.0	25.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	63.	****	-37.	15.	38.	44.	50.	56.	61.	64.	53.	SNR	
10.0	29.1	25.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	67.	18.	48.	50.	52.	54.	56.	60.	65.	68.	60.	SNR	
14.0	31.2	25.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	69.	33.	47.	53.	56.	60.	64.	67.	69.	69.	69.	SNR	
18.0	25.8	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	68.	35.	49.	59.	65.	67.	68.	68.	68.	59.	54.	SNR	
22.0	14.6	10.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	56.	34.	49.	54.	59.	56.	49.	37.	18.	-4.	-27.	SNR	
TX LOCATION = 17.22, 100.62													
RX LOCATION = -12.20, 96.90													
2.0	27.3	24.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	56.	****	-32.	11.	31.	43.	52.	50.	56.	61.	43.	SNR	
6.0	27.4	24.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	47.	****	****	-57.	-8.	14.	31.	38.	46.	52.	38.	SNR	
10.0	28.8	25.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	62.	-44.	17.	37.	44.	50.	56.	57.	61.	63.	54.	SNR	
14.0	27.9	23.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

58.	65.	38.	51.	56.	60.	63.	65.	65.	65.	64.	53.	SNR	
18.0	28.4	23.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	32.	51.	59.	63.	65.	65.	65.	65.	64.	53.	SNR	
22.0	21.7	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	29.	47.	55.	60.	62.	62.	60.	48.	35.	15.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -34.87, 138.50													
2.0	22.7	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
26.	40.	****	****	-47.	0.	22.	37.	32.	39.	49.	****	SNR	
6.0	29.2	25.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	-12.	****	****	-77.	-13.	9.	28.	36.	3.	38.	42.	SNR	
10.0	20.9	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	49.	-70.	2.	25.	38.	46.	51.	49.	15.	53.	-87.	SNR	
14.0	20.9	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	56.	11.	31.	44.	52.	56.	57.	43.	20.	54.	-74.	SNR	
18.0	17.1	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	55.	30.	36.	47.	53.	55.	37.	6.	-44.	****	****	SNR	
22.0	17.6	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	47.	-55.	15.	38.	46.	49.	37.	12.	-32.	-90.	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -12.33, 130.83													
2.0	30.3	26.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	56.	****	****	-21.	18.	35.	42.	35.	53.	57.	58.	SNR	
6.0	38.4	34.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	58.	****	****	-54.	-6.	20.	33.	40.	50.	52.	55.	SNR	
10.0	35.2	30.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	63.	-48.	14.	34.	44.	51.	55.	58.	61.	62.	63.	SNR	
14.0	37.0	28.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	11.	34.	46.	55.	60.	64.	65.	65.	64.	64.	SNR	
18.0	29.3	23.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	64.	19.	38.	49.	58.	63.	64.	63.	64.	62.	55.	SNR	
22.0	25.6	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	61.	-3.	35.	48.	54.	60.	60.	61.	60.	51.	39.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -23.67, 135.83													
2.0	29.6	25.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	53.	****	****	-40.	10.	26.	38.	30.	10.	54.	48.	SNR	
6.0	35.6	30.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	54.	****	****	-72.	-9.	17.	30.	37.	49.	24.	-8.	SNR	
10.0	32.6	26.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	26.	-66.	14.	31.	42.	49.	53.	56.	42.	21.	60.	SNR	
14.0	33.5	26.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	35.	13.	34.	46.	55.	59.	61.	60.	57.	34.	8.	SNR	
18.0	26.8	21.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	33.	18.	38.	50.	56.	59.	58.	38.	61.	54.	45.	SNR	
22.0	25.1	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	38.	-31.	27.	42.	49.	52.	52.	26.	56.	47.	35.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -19.33, 146.83													
2.0	24.7	21.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	34.	****	****	-85.	-26.	6.	26.	33.	41.	12.	33.	SNR	
6.0	30.2	24.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	38.	****	****	-96.	-36.	-2.	20.	31.	37.	43.	43.	SNR	
10.0	27.4	21.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

49.	53.	-69.	-4.	20.	34.	43.	49.	53.	55.	51.	28.	SNR	
14.0	30.1	24.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	58.	-7.	19.	35.	46.	53.	57.	59.	58.	57.	49.	SNR	
18.0	22.7	17.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	56.	21.	29.	42.	51.	55.	56.	54.	36.	15.	-18.	SNR	
22.0	21.7	17.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	50.	-78.	4.	29.	41.	48.	50.	49.	25.	-4.	-48.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -17.30, 123.63													
2.0	25.9	22.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	57.	****	-99.	8.	35.	44.	35.	56.	59.	51.	33.	SNR	
6.0	32.9	28.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	57.	****	****	-31.	11.	28.	38.	51.	52.	56.	59.	SNR	
10.0	30.9	25.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	64.	-40.	24.	41.	50.	55.	58.	60.	63.	65.	64.	SNR	
14.0	31.8	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	66.	20.	41.	52.	59.	64.	66.	66.	66.	66.	65.	SNR	
18.0	25.9	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	65.	24.	43.	54.	62.	65.	64.	65.	65.	57.	49.	SNR	
22.0	22.2	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	63.	14.	43.	54.	59.	61.	63.	63.	52.	38.	18.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -2.47, 140.63													
2.0	34.1	29.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	-16.	****	****	-58.	-2.	19.	33.	39.	45.	17.	-28.	SNR	
6.0	40.8	34.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	22.	****	****	-69.	-13.	13.	28.	37.	41.	47.	49.	SNR	
10.0	36.2	28.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	43.	-58.	11.	32.	43.	50.	53.	55.	56.	54.	36.	SNR	
14.0	29.5	23.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	60.	-2.	31.	44.	52.	58.	61.	62.	60.	59.	46.	SNR	
18.0	23.4	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	59.	6.	37.	48.	56.	60.	60.	59.	44.	25.	54.	SNR	
22.0	21.2	16.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	54.	-34.	24.	42.	51.	54.	55.	51.	25.	52.	-54.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = 13.45, 144.75													
2.0	24.6	22.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
43.	39.	****	****	-68.	-14.	12.	28.	36.	43.	13.	-32.	SNR	
6.0	25.4	22.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	34.	****	****	-62.	-19.	1.	16.	26.	39.	23.	-6.	SNR	
10.0	23.3	19.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	47.	-42.	13.	30.	37.	42.	45.	49.	38.	20.	-10.	SNR	
14.0	23.2	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	56.	6.	36.	45.	49.	53.	56.	56.	38.	12.	-29.	SNR	
18.0	25.1	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	58.	9.	38.	48.	54.	58.	58.	56.	51.	32.	11.	SNR	
22.0	21.6	17.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	51.	-43.	17.	36.	45.	50.	52.	48.	22.	-12.	-61.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = 14.67, 121.05													
2.0	28.5	24.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	56.	****	-59.	1.	26.	36.	44.	52.	56.	57.	46.	SNR	
6.0	31.0	27.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

49.	53.	****	****	-47.	-7.	14.	26.	39.	46.	51.	55.	SNR	
10.0	30.8	27.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	-36.	22.	36.	43.	47.	50.	55.	59.	62.	62.	SNR	
14.0	30.3	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	64.	23.	42.	47.	50.	52.	60.	63.	63.	63.	60.	SNR	
18.0	29.0	24.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	19.	23.	44.	53.	59.	61.	60.	45.	20.	62.	52.	SNR	
22.0	22.4	17.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	32.	8.	35.	45.	51.	54.	29.	58.	47.	31.	6.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = 17.22, 100.62													
2.0	27.3	24.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	61.	****	-18.	21.	36.	48.	55.	58.	61.	62.	43.	SNR	
6.0	27.4	24.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	52.	****	****	-47.	0.	17.	30.	43.	51.	56.	40.	SNR	
10.0	28.8	25.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	63.	-51.	21.	39.	45.	49.	53.	57.	62.	64.	54.	SNR	
14.0	27.9	23.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	65.	31.	47.	51.	54.	58.	61.	64.	65.	64.	53.	SNR	
18.0	28.4	22.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	23.	46.	55.	61.	64.	65.	65.	65.	63.	54.	SNR	
22.0	21.7	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	22.	44.	53.	60.	62.	62.	60.	48.	35.	15.	SNR	



Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 12  
 Sunspot Number = 150.00

Time-of-day (UT) = 2  
 Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Darwin	-999.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
ASprin	-999.0	-999.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
TownsV	-999.0	-999.0	-999.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Derby	-999.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0
Jayapu	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0	-999.0	-999.0
Guam	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0

Time-of-day (UT) = 2  
 Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-999.0	-23.0	-59.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Darwin	-999.0	500.0	-53.0	-89.0	-22.0	-83.0	-999.0	-999.0	-999.0	-999.0
ASprin	-23.0	-54.0	500.0	-49.0	-44.0	-999.0	-999.0	-999.0	-999.0	-999.0
TownsV	-58.0	-89.0	-49.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Derby	-999.0	-23.0	-43.0	-999.0	500.0	-999.0	-999.0	-85.0	-98.0	-999.0
Jayapu	-999.0	-83.0	-999.0	-999.0	-999.0	500.0	-81.0	-999.0	-999.0	-999.0
Guam	-999.0	-999.0	-999.0	-999.0	-999.0	-81.0	500.0	-53.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-52.0	500.0	5.0	-61.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	6.0	500.0	-32.0
Cocos	-999.0	-999.0	-999.0	-999.0	-99.0	-999.0	-999.0	-59.0	-18.0	500.0

Time-of-day (UT) = 2  
 Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-27.0	31.0	1.0	-13.0	-999.0	-999.0	-91.0	-999.0	-48.0
Darwin	-26.0	500.0	17.0	-17.0	47.0	15.0	-28.0	-11.0	-44.0	-21.0
ASprin	31.0	16.0	500.0	18.0	20.0	-34.0	-72.0	-56.0	-50.0	-41.0
TownsV	2.0	-16.0	18.0	500.0	-33.0	-16.0	-57.0	-60.0	-88.0	-85.0
Derby	-13.0	47.0	20.0	-32.0	500.0	-23.0	-53.0	-18.0	-24.0	6.0
Jayapu	-999.0	15.0	-34.0	-16.0	-22.0	500.0	5.0	-13.0	-51.0	-58.0
Guam	-999.0	-40.0	-83.0	-67.0	-63.0	5.0	500.0	8.0	-45.0	-78.0
Manila	-999.0	-21.0	-68.0	-72.0	-28.0	-8.0	9.0	500.0	30.0	0.0
Songkh	-999.0	-43.0	-67.0	-93.0	-37.0	-54.0	-43.0	32.0	500.0	11.0
Cocos	-47.0	-21.0	-40.0	-85.0	8.0	-58.0	-68.0	1.0	21.0	500.0

Time-of-day (UT) = 2  
Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	16.0	60.0	32.0	25.0	-14.0	-48.0	-30.0	-47.0	-3.0
Darwin	17.0	500.0	51.0	22.0	60.0	45.0	12.0	22.0	1.0	18.0
ASprin	60.0	50.0	500.0	52.0	52.0	12.0	-15.0	-6.0	-16.0	10.0
TownsV	33.0	22.0	53.0	500.0	14.0	25.0	-6.0	-8.0	-34.0	-26.0
Derby	25.0	59.0	52.0	13.0	500.0	18.0	-3.0	16.0	10.0	34.0
Jayapu	-14.0	45.0	13.0	25.0	19.0	500.0	42.0	27.0	1.0	-1.0
Guam	-45.0	6.0	-22.0	-10.0	-9.0	44.0	500.0	29.0	1.0	-19.0
Manila	-37.0	17.0	-13.0	-14.0	13.0	30.0	28.0	500.0	49.0	26.0
Songkh	-43.0	2.0	-27.0	-38.0	-1.0	0.0	2.0	49.0	500.0	31.0
Cocos	0.0	18.0	10.0	-26.0	35.0	-2.0	-14.0	26.0	36.0	500.0

Time-of-day (UT) = 2  
Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	31.0	64.0	53.0	22.0	16.0	-11.0	2.0	-10.0	20.0
Darwin	32.0	500.0	59.0	47.0	65.0	53.0	27.0	35.0	25.0	36.0
ASprin	65.0	59.0	500.0	60.0	61.0	29.0	13.0	18.0	12.0	26.0
TownsV	55.0	47.0	61.0	500.0	29.0	40.0	20.0	17.0	0.0	6.0
Derby	22.0	64.0	61.0	29.0	500.0	33.0	20.0	30.0	26.0	44.0
Jayapu	17.0	53.0	29.0	40.0	34.0	500.0	46.0	40.0	22.0	20.0
Guam	-6.0	22.0	9.0	17.0	16.0	49.0	500.0	44.0	23.0	9.0
Manila	-3.0	32.0	11.0	10.0	23.0	45.0	43.0	500.0	56.0	39.0
Songkh	-7.0	25.0	3.0	-4.0	21.0	21.0	21.0	55.0	500.0	43.0
Cocos	22.0	35.0	26.0	6.0	44.0	19.0	12.0	36.0	48.0	500.0

Time-of-day (UT) = 2  
Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	19.0	59.0	61.0	54.0	28.0	8.0	22.0	13.0	36.0
Darwin	19.0	500.0	66.0	54.0	42.0	60.0	9.0	43.0	36.0	43.0
ASprin	59.0	66.0	500.0	62.0	62.0	47.0	27.0	30.0	26.0	38.0
TownsV	62.0	54.0	62.0	500.0	14.0	51.0	32.0	29.0	16.0	26.0
Derby	55.0	41.0	62.0	14.0	500.0	49.0	32.0	43.0	36.0	38.0
Jayapu	29.0	60.0	47.0	51.0	49.0	500.0	63.0	45.0	35.0	34.0
Guam	11.0	11.0	26.0	28.0	26.0	65.0	500.0	51.0	37.0	23.0
Manila	14.0	36.0	19.0	19.0	41.0	46.0	50.0	500.0	59.0	45.0
Songkh	16.0	35.0	20.0	14.0	29.0	33.0	36.0	59.0	500.0	52.0
Cocos	37.0	42.0	38.0	26.0	35.0	33.0	28.0	44.0	55.0	500.0

Time-of-day (UT) = 2  
Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	54.0	51.0	62.0	59.0	38.0	26.0	31.0	23.0	33.0
Darwin	54.0	500.0	44.0	60.0	40.0	58.0	47.0	50.0	42.0	35.0

ASprin	51.0	44.0	500.0	46.0	46.0	51.0	37.0	40.0	35.0	30.0
TownsV	63.0	60.0	46.0	500.0	53.0	58.0	15.0	40.0	29.0	33.0
Derby	59.0	40.0	46.0	53.0	500.0	52.0	17.0	4.0	43.0	56.0
Jayapu	38.0	58.0	51.0	57.0	52.0	500.0	58.0	54.0	41.0	39.0
Guam	28.0	38.0	32.0	15.0	18.0	59.0	500.0	54.0	45.0	23.0
Manila	17.0	44.0	37.0	38.0	-3.0	54.0	54.0	500.0	63.0	52.0
Songkh	26.0	42.0	26.0	27.0	43.0	38.0	45.0	63.0	500.0	50.0
Cocos	32.0	35.0	30.0	33.0	56.0	39.0	36.0	52.0	58.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	59.0	49.0	45.0	35.0	28.0	32.0	39.0	34.0	40.0
Darwin	59.0	500.0	46.0	65.0	33.0	21.0	53.0	56.0	51.0	53.0
ASprin	49.0	45.0	500.0	47.0	47.0	56.0	45.0	18.0	41.0	3.0
TownsV	46.0	65.0	47.0	500.0	58.0	62.0	48.0	11.0	36.0	40.0
Derby	35.0	33.0	47.0	58.0	500.0	57.0	47.0	54.0	3.0	60.0
Jayapu	24.0	21.0	56.0	62.0	57.0	500.0	52.0	62.0	8.0	45.0
Guam	33.0	48.0	36.0	38.0	39.0	52.0	500.0	58.0	49.0	37.0
Manila	32.0	53.0	9.0	0.0	48.0	64.0	58.0	500.0	64.0	55.0
Songkh	37.0	49.0	39.0	33.0	6.0	8.0	50.0	64.0	500.0	56.0
Cocos	39.0	53.0	10.0	41.0	59.0	45.0	43.0	56.0	61.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	49.0	43.0	48.0	-6.0	51.0	39.0	19.0	38.0	50.0
Darwin	46.0	500.0	44.0	41.0	16.0	-36.0	44.0	40.0	55.0	56.0
ASprin	43.0	44.0	500.0	46.0	46.0	60.0	50.0	52.0	16.0	54.0
TownsV	48.0	41.0	46.0	500.0	53.0	56.0	53.0	50.0	41.0	16.0
Derby	-6.0	16.0	46.0	53.0	500.0	61.0	52.0	56.0	55.0	52.0
Jayapu	51.0	-36.0	60.0	56.0	61.0	500.0	57.0	53.0	-13.0	23.0
Guam	39.0	43.0	41.0	47.0	46.0	57.0	500.0	61.0	51.0	13.0
Manila	14.0	40.0	44.0	42.0	54.0	53.0	61.0	500.0	66.0	58.0
Songkh	42.0	53.0	12.0	41.0	51.0	-13.0	51.0	66.0	500.0	61.0
Cocos	49.0	57.0	54.0	12.0	51.0	17.0	13.0	57.0	62.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	38.0	28.0	46.0	-33.0	55.0	41.0	-7.0	21.0	-999.0
Darwin	27.0	500.0	40.0	40.0	-18.0	-999.0	24.0	16.0	47.0	58.0
ASprin	28.0	40.0	500.0	42.0	42.0	51.0	53.0	52.0	23.0	47.0
TownsV	46.0	40.0	42.0	500.0	41.0	47.0	55.0	44.0	16.0	35.0
Derby	-33.0	-18.0	42.0	41.0	500.0	48.0	47.0	42.0	47.0	42.0
Jayapu	55.0	-999.0	51.0	47.0	48.0	500.0	60.0	34.0	53.0	-5.0
Guam	45.0	24.0	47.0	53.0	43.0	60.0	500.0	64.0	54.0	-33.0
Manila	-28.0	16.0	47.0	39.0	37.0	34.0	64.0	500.0	67.0	46.0

Songkh	19.0	46.0	20.0	11.0	46.0	50.0	54.0	67.0	500.0	43.0
Cocos	-999.0	58.0	48.0	33.0	33.0	-28.0	-32.0	46.0	43.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-999.0	-58.0	-61.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Darwin	-999.0	500.0	-88.0	-80.0	-94.0	-83.0	-999.0	-999.0	-999.0	-999.0
ASprin	-60.0	-90.0	500.0	-52.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
TownsV	-59.0	-77.0	-48.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Derby	-999.0	-96.0	-999.0	-999.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0
Jayapu	-999.0	-83.0	-999.0	-999.0	-999.0	500.0	-32.0	-999.0	-999.0	-999.0
Guam	-999.0	-999.0	-999.0	-999.0	-999.0	-28.0	500.0	-999.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-76.0	14.0	7.0	-82.0	-58.0	-999.0	-999.0	-999.0	-999.0
Darwin	-76.0	500.0	-4.0	-3.0	3.0	19.0	-20.0	-46.0	-999.0	-999.0
ASprin	14.0	-3.0	500.0	17.0	-13.0	-52.0	-47.0	-999.0	-999.0	-999.0
TownsV	8.0	-2.0	18.0	500.0	-73.0	15.0	-8.0	-74.0	-999.0	-999.0
Derby	-82.0	3.0	-13.0	-74.0	500.0	-88.0	-47.0	-83.0	-999.0	-999.0
Jayapu	-57.0	20.0	-51.0	14.0	-88.0	500.0	28.0	-27.0	-999.0	-999.0
Guam	-999.0	-29.0	-62.0	-25.0	-62.0	29.0	500.0	7.0	-77.0	-999.0
Manila	-999.0	-59.0	-999.0	-94.0	-99.0	-28.0	5.0	500.0	-37.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-78.0	-37.0	500.0	-999.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-4.0	43.0	35.0	0.0	-7.0	-35.0	-95.0	-999.0	-77.0
Darwin	-2.0	500.0	33.0	29.0	49.0	45.0	20.0	10.0	-60.0	-52.0
ASprin	43.0	32.0	500.0	42.0	29.0	6.0	8.0	-16.0	-86.0	-70.0
TownsV	37.0	30.0	44.0	500.0	-2.0	39.0	25.0	-1.0	-76.0	-93.0
Derby	-1.0	48.0	28.0	-4.0	500.0	3.0	3.0	-1.0	-69.0	-30.0
Jayapu	-6.0	46.0	7.0	39.0	5.0	500.0	52.0	25.0	-29.0	-66.0
Guam	-32.0	13.0	-5.0	16.0	-9.0	54.0	500.0	35.0	-13.0	-67.0
Manila	-95.0	-2.0	-32.0	-18.0	-16.0	17.0	31.0	500.0	15.0	-58.0
Songkh	-999.0	-66.0	-96.0	-84.0	-80.0	-39.0	-16.0	15.0	500.0	-57.0
Cocos	-77.0	-54.0	-72.0	-96.0	-31.0	-69.0	-62.0	-47.0	-47.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	28.0	63.0	47.0	31.0	20.0	1.0	-18.0	-63.0	-12.0
Darwin	30.0	500.0	55.0	43.0	59.0	50.0	34.0	28.0	-12.0	-3.0
ASprin	64.0	54.0	500.0	60.0	53.0	33.0	24.0	12.0	-28.0	-7.0
TownsV	49.0	44.0	61.0	500.0	30.0	52.0	37.0	21.0	-22.0	-31.0
Derby	31.0	58.0	53.0	28.0	500.0	32.0	22.0	19.0	-16.0	13.0
Jayapu	22.0	51.0	35.0	51.0	33.0	500.0	59.0	42.0	3.0	-10.0
Guam	6.0	35.0	20.0	36.0	19.0	62.0	500.0	45.0	14.0	-20.0
Manila	-15.0	23.0	1.0	11.0	12.0	41.0	43.0	500.0	39.0	-12.0
Songkh	-61.0	-14.0	-34.0	-27.0	-24.0	-8.0	11.0	38.0	500.0	-8.0
Cocos	-13.0	-6.0	-9.0	-36.0	11.0	-13.0	-19.0	-7.0	0.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	37.0	63.0	58.0	37.0	33.0	21.0	7.0	-24.0	9.0
Darwin	40.0	500.0	61.0	55.0	64.0	59.0	43.0	38.0	13.0	24.0
ASprin	64.0	60.0	500.0	63.0	61.0	42.0	33.0	25.0	1.0	19.0
TownsV	61.0	56.0	64.0	500.0	40.0	58.0	44.0	32.0	5.0	2.0
Derby	38.0	62.0	60.0	38.0	500.0	42.0	32.0	30.0	11.0	30.0
Jayapu	36.0	59.0	44.0	57.0	44.0	500.0	59.0	48.0	21.0	17.0
Guam	28.0	44.0	35.0	45.0	36.0	64.0	500.0	50.0	26.0	5.0
Manila	13.0	36.0	21.0	30.0	30.0	51.0	49.0	500.0	46.0	14.0
Songkh	-19.0	11.0	-3.0	2.0	4.0	16.0	24.0	44.0	500.0	14.0
Cocos	9.0	20.0	17.0	-2.0	28.0	13.0	1.0	14.0	17.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	51.0	45.0	62.0	55.0	42.0	33.0	20.0	2.0	28.0
Darwin	54.0	500.0	65.0	60.0	63.0	61.0	47.0	45.0	25.0	36.0
ASprin	46.0	64.0	500.0	66.0	65.0	56.0	40.0	34.0	21.0	31.0
TownsV	65.0	60.0	68.0	500.0	54.0	61.0	49.0	39.0	23.0	23.0
Derby	55.0	61.0	65.0	52.0	500.0	53.0	42.0	41.0	24.0	40.0
Jayapu	44.0	61.0	57.0	60.0	55.0	500.0	65.0	44.0	29.0	31.0
Guam	41.0	50.0	44.0	51.0	45.0	70.0	500.0	54.0	37.0	20.0
Manila	27.0	46.0	34.0	39.0	40.0	48.0	53.0	500.0	52.0	26.0
Songkh	7.0	23.0	16.0	19.0	17.0	15.0	35.0	50.0	500.0	31.0
Cocos	28.0	33.0	30.0	20.0	38.0	28.0	16.0	26.0	30.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	57.0	41.0	60.0	60.0	53.0	42.0	35.0	16.0	34.0
Darwin	59.0	500.0	63.0	64.0	59.0	66.0	51.0	49.0	37.0	42.0
ASprin	41.0	62.0	500.0	57.0	60.0	58.0	46.0	46.0	32.0	38.0
TownsV	61.0	64.0	58.0	500.0	58.0	64.0	55.0	48.0	33.0	32.0

Derby	61.0	58.0	60.0	57.0	500.0	57.0	46.0	48.0	36.0	51.0
Jayapu	54.0	66.0	59.0	63.0	58.0	500.0	64.0	57.0	41.0	38.0
Guam	47.0	49.0	48.0	56.0	48.0	67.0	500.0	57.0	45.0	26.0
Manila	39.0	45.0	40.0	43.0	49.0	54.0	56.0	500.0	58.0	39.0
Songkh	20.0	36.0	23.0	26.0	32.0	24.0	43.0	56.0	500.0	38.0
Cocos	36.0	40.0	37.0	31.0	51.0	37.0	26.0	39.0	43.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	61.0	27.0	50.0	53.0	57.0	49.0	42.0	32.0	8.0
Darwin	61.0	500.0	55.0	67.0	50.0	61.0	58.0	56.0	46.0	51.0
ASprin	27.0	55.0	500.0	43.0	50.0	62.0	53.0	48.0	39.0	49.0
TownsV	51.0	67.0	43.0	500.0	61.0	66.0	59.0	39.0	40.0	38.0
Derby	53.0	49.0	50.0	61.0	500.0	61.0	54.0	53.0	46.0	52.0
Jayapu	57.0	61.0	62.0	66.0	61.0	500.0	64.0	66.0	27.0	42.0
Guam	51.0	55.0	54.0	54.0	49.0	65.0	500.0	62.0	51.0	37.0
Manila	44.0	52.0	46.0	38.0	47.0	64.0	62.0	500.0	62.0	40.0
Songkh	34.0	42.0	35.0	37.0	38.0	26.0	51.0	61.0	500.0	46.0
Cocos	3.0	50.0	49.0	37.0	52.0	41.0	39.0	46.0	51.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	55.0	-6.0	35.0	41.0	58.0	51.0	46.0	37.0	39.0
Darwin	55.0	500.0	40.0	61.0	35.0	55.0	61.0	60.0	50.0	52.0
ASprin	-6.0	40.0	500.0	22.0	33.0	65.0	38.0	33.0	24.0	27.0
TownsV	35.0	60.0	22.0	500.0	64.0	68.0	61.0	27.0	27.0	43.0
Derby	41.0	35.0	33.0	64.0	500.0	63.0	57.0	57.0	51.0	56.0
Jayapu	59.0	55.0	65.0	68.0	63.0	500.0	64.0	56.0	-5.0	47.0
Guam	52.0	60.0	35.0	59.0	53.0	64.0	500.0	65.0	53.0	22.0
Manila	47.0	58.0	27.0	16.0	52.0	56.0	65.0	500.0	64.0	46.0
Songkh	38.0	47.0	14.0	22.0	44.0	-6.0	53.0	64.0	500.0	52.0
Cocos	38.0	52.0	24.0	43.0	56.0	47.0	23.0	51.0	56.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	44.0	-82.0	16.0	19.0	60.0	51.0	47.0	39.0	43.0
Darwin	45.0	500.0	19.0	52.0	19.0	44.0	52.0	44.0	47.0	55.0
ASprin	-82.0	19.0	500.0	-2.0	14.0	66.0	60.0	17.0	7.0	4.0
TownsV	16.0	52.0	-2.0	500.0	56.0	57.0	62.0	57.0	12.0	43.0
Derby	19.0	19.0	14.0	56.0	500.0	65.0	59.0	58.0	53.0	59.0
Jayapu	60.0	44.0	66.0	57.0	65.0	500.0	58.0	41.0	53.0	49.0
Guam	53.0	51.0	58.0	61.0	56.0	58.0	500.0	66.0	55.0	-7.0
Manila	49.0	43.0	-3.0	53.0	56.0	41.0	66.0	500.0	53.0	52.0
Songkh	41.0	46.0	-25.0	-12.0	49.0	45.0	55.0	53.0	500.0	38.0
Cocos	42.0	55.0	-8.0	43.0	59.0	49.0	-6.0	55.0	40.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	4.0	44.0	34.0	10.0	5.0	-1.0	-16.0	-61.0	-61.0
Darwin	20.0	500.0	40.0	32.0	45.0	33.0	23.0	14.0	-28.0	-23.0
ASprin	49.0	30.0	500.0	41.0	36.0	14.0	11.0	-11.0	-37.0	-51.0
TownsV	45.0	28.0	47.0	500.0	17.0	33.0	22.0	3.0	-41.0	-48.0
Derby	16.0	35.0	37.0	11.0	500.0	8.0	9.0	0.0	-45.0	-26.0
Jayapu	19.0	31.0	23.0	35.0	18.0	500.0	42.0	27.0	-2.0	-28.0
Guam	8.0	14.0	14.0	20.0	10.0	37.0	500.0	36.0	6.0	-24.0
Manila	-11.0	0.0	-15.0	-9.0	-3.0	16.0	32.0	500.0	25.0	-23.0
Songkh	-62.0	-46.0	-44.0	-54.0	-53.0	-24.0	-4.0	18.0	500.0	-44.0
Cocos	-70.0	-48.0	-66.0	-69.0	-40.0	-58.0	-42.0	-36.0	-51.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	31.0	57.0	48.0	35.0	27.0	25.0	20.0	0.0	8.0
Darwin	40.0	500.0	55.0	47.0	58.0	51.0	44.0	43.0	24.0	29.0
ASprin	60.0	49.0	500.0	51.0	53.0	34.0	36.0	33.0	19.0	23.0
TownsV	54.0	45.0	55.0	500.0	36.0	47.0	43.0	38.0	24.0	8.0
Derby	38.0	52.0	53.0	32.0	500.0	36.0	37.0	39.0	22.0	33.0
Jayapu	35.0	50.0	40.0	48.0	42.0	500.0	54.0	47.0	37.0	28.0
Guam	30.0	39.0	38.0	41.0	37.0	50.0	500.0	51.0	39.0	24.0
Manila	23.0	33.0	26.0	29.0	35.0	40.0	49.0	500.0	54.0	26.0
Songkh	-1.0	11.0	10.0	12.0	12.0	19.0	32.0	48.0	500.0	17.0
Cocos	2.0	14.0	14.0	-4.0	24.0	11.0	13.0	22.0	21.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	41.0	60.0	52.0	46.0	38.0	32.0	28.0	17.0	29.0
Darwin	47.0	500.0	58.0	52.0	61.0	57.0	50.0	50.0	38.0	44.0
ASprin	62.0	55.0	500.0	58.0	57.0	46.0	44.0	42.0	35.0	38.0
TownsV	56.0	50.0	60.0	500.0	46.0	54.0	49.0	45.0	36.0	28.0
Derby	48.0	58.0	57.0	44.0	500.0	47.0	46.0	46.0	38.0	48.0
Jayapu	44.0	56.0	50.0	55.0	51.0	500.0	56.0	52.0	45.0	43.0
Guam	38.0	49.0	46.0	50.0	48.0	56.0	500.0	54.0	47.0	39.0
Manila	33.0	46.0	40.0	42.0	44.0	50.0	53.0	500.0	55.0	38.0
Songkh	18.0	30.0	22.0	23.0	32.0	35.0	41.0	50.0	500.0	37.0
Cocos	25.0	34.0	31.0	20.0	41.0	32.0	30.0	36.0	39.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
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Adelad	500.0	49.0	64.0	58.0	52.0	47.0	38.0	35.0	30.0	41.0
Darwin	54.0	500.0	62.0	57.0	64.0	60.0	52.0	51.0	41.0	52.0
ASprin	66.0	59.0	500.0	63.0	61.0	53.0	46.0	45.0	39.0	46.0
TownsV	61.0	56.0	64.0	500.0	53.0	59.0	51.0	47.0	41.0	39.0
Derby	55.0	62.0	61.0	52.0	500.0	54.0	49.0	50.0	41.0	54.0
Jayapu	51.0	59.0	55.0	60.0	55.0	500.0	56.0	52.0	48.0	50.0
Guam	46.0	54.0	51.0	55.0	53.0	58.0	500.0	55.0	49.0	46.0
Manila	43.0	52.0	47.0	50.0	51.0	54.0	54.0	500.0	56.0	47.0
Songkh	34.0	35.0	32.0	35.0	33.0	44.0	45.0	52.0	500.0	44.0
Cocos	38.0	44.0	42.0	34.0	50.0	43.0	37.0	43.0	45.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	54.0	59.0	62.0	56.0	53.0	43.0	41.0	37.0	47.0
Darwin	59.0	500.0	66.0	62.0	65.0	61.0	53.0	52.0	44.0	57.0
ASprin	61.0	62.0	500.0	66.0	64.0	57.0	48.0	46.0	43.0	52.0
TownsV	65.0	59.0	66.0	500.0	57.0	61.0	53.0	48.0	43.0	47.0
Derby	59.0	63.0	65.0	57.0	500.0	57.0	49.0	51.0	44.0	59.0
Jayapu	57.0	60.0	59.0	63.0	59.0	500.0	56.0	52.0	48.0	55.0
Guam	52.0	56.0	54.0	59.0	54.0	60.0	500.0	56.0	51.0	51.0
Manila	50.0	54.0	52.0	54.0	56.0	56.0	56.0	500.0	57.0	53.0
Songkh	44.0	42.0	42.0	43.0	42.0	49.0	48.0	54.0	500.0	50.0
Cocos	46.0	51.0	49.0	43.0	55.0	50.0	42.0	47.0	49.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	57.0	44.0	66.0	60.0	57.0	47.0	45.0	43.0	52.0
Darwin	63.0	500.0	68.0	65.0	60.0	64.0	55.0	52.0	47.0	61.0
ASprin	45.0	64.0	500.0	60.0	66.0	60.0	50.0	48.0	46.0	55.0
TownsV	68.0	62.0	61.0	500.0	60.0	63.0	55.0	48.0	46.0	52.0
Derby	63.0	58.0	67.0	61.0	500.0	60.0	50.0	53.0	46.0	62.0
Jayapu	61.0	62.0	63.0	64.0	61.0	500.0	52.0	54.0	49.0	58.0
Guam	56.0	57.0	57.0	61.0	55.0	56.0	500.0	57.0	53.0	54.0
Manila	55.0	55.0	55.0	55.0	58.0	59.0	58.0	500.0	59.0	58.0
Songkh	50.0	46.0	48.0	49.0	47.0	51.0	51.0	56.0	500.0	56.0
Cocos	51.0	55.0	53.0	49.0	58.0	53.0	45.0	50.0	53.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	60.0	20.0	56.0	63.0	60.0	52.0	50.0	49.0	49.0
Darwin	65.0	500.0	58.0	68.0	53.0	61.0	58.0	56.0	49.0	63.0
ASprin	21.0	54.0	500.0	48.0	55.0	63.0	53.0	50.0	49.0	57.0
TownsV	57.0	64.0	49.0	500.0	64.0	65.0	58.0	50.0	49.0	55.0
Derby	65.0	50.0	56.0	64.0	500.0	63.0	57.0	55.0	50.0	62.0
Jayapu	63.0	59.0	65.0	67.0	64.0	500.0	46.0	57.0	40.0	59.0



Guam	57.0	59.0	58.0	62.0	61.0	49.0	500.0	59.0	56.0	55.0
Manila	57.0	59.0	57.0	57.0	60.0	61.0	61.0	500.0	63.0	61.0
Songkh	53.0	48.0	51.0	52.0	52.0	41.0	55.0	60.0	500.0	57.0
Cc	49.0	58.0	56.0	53.0	60.0	55.0	49.0	55.0	57.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	Townsv	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	62.0	-13.0	36.0	50.0	62.0	56.0	54.0	53.0	7.0
Darwin	65.0	500.0	44.0	61.0	39.0	56.0	63.0	61.0	18.0	64.0
ASprin	-12.0	41.0	500.0	27.0	39.0	65.0	44.0	41.0	50.0	43.0
Townsv	37.0	59.0	28.0	500.0	66.0	67.0	62.0	38.0	49.0	56.0
Derby	50.0	37.0	40.0	66.0	500.0	65.0	60.0	60.0	35.0	64.0
Jayapu	63.0	54.0	67.0	68.0	66.0	500.0	33.0	52.0	24.0	58.0
Guam	57.0	61.0	45.0	63.0	62.0	33.0	500.0	64.0	59.0	40.0
Manila	56.0	61.0	44.0	39.0	63.0	54.0	65.0	500.0	67.0	61.0
Songkh	54.0	16.0	54.0	53.0	31.0	24.0	59.0	65.0	500.0	61.0
Cocos	15.0	61.0	42.0	55.0	63.0	56.0	38.0	59.0	62.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	Townsv	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	47.0	-12.0	5.0	27.0	63.0	55.0	55.0	53.0	53.0
Darwin	51.0	500.0	23.0	52.0	22.0	47.0	57.0	55.0	61.0	63.0
ASprin	-12.0	22.0	500.0	4.0	17.0	65.0	62.0	30.0	33.0	23.0
Townsv	5.0	50.0	4.0	500.0	57.0	57.0	63.0	23.0	31.0	52.0
Derby	28.0	21.0	17.0	57.0	500.0	65.0	61.0	62.0	61.0	65.0
Jayapu	63.0	46.0	66.0	58.0	66.0	500.0	12.0	44.0	58.0	55.0
Guam	54.0	56.0	63.0	64.0	63.0	12.0	500.0	67.0	60.0	20.0
Manila	54.0	54.0	27.0	18.0	63.0	44.0	67.0	500.0	69.0	62.0
Songkh	52.0	59.0	28.0	25.0	60.0	57.0	60.0	68.0	500.0	63.0
Cocos	53.0	62.0	21.0	51.0	65.0	54.0	20.0	62.0	64.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	Townsv	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	26.0	-11.0	-30.0	-5.0	62.0	30.0	33.0	35.0	-999.0
Darwin	36.0	500.0	0.0	36.0	5.0	32.0	49.0	46.0	52.0	63.0
ASprin	-11.0	0.0	500.0	-10.0	-7.0	55.0	61.0	59.0	16.0	60.0
Townsv	-30.0	36.0	-10.0	500.0	47.0	49.0	61.0	57.0	36.0	28.0
Derby	-5.0	5.0	-7.0	47.0	500.0	57.0	59.0	56.0	59.0	64.0
Jayapu	62.0	32.0	56.0	49.0	57.0	500.0	-11.0	27.0	49.0	37.0
Guam	35.0	48.0	62.0	61.0	60.0	-11.0	500.0	59.0	58.0	-10.0
Manila	37.0	46.0	60.0	58.0	56.0	27.0	59.0	500.0	60.0	61.0
Songkh	36.0	51.0	-6.0	33.0	59.0	49.0	57.0	60.0	500.0	54.0
Cocos	-87.0	63.0	60.0	28.0	64.0	36.0	-10.0	62.0	54.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	Townsv	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	16.0	43.0	32.0	29.0	10.0	-4.0	3.0	0.0	18.0
Darwin	29.0	500.0	39.0	30.0	42.0	34.0	25.0	33.0	22.0	31.0
ASprin	48.0	31.0	500.0	36.0	38.0	20.0	16.0	19.0	8.0	24.0
Townsv	41.0	26.0	41.0	500.0	26.0	28.0	16.0	21.0	9.0	10.0
Derby	35.0	36.0	39.0	23.0	500.0	20.0	13.0	24.0	22.0	34.0
Jayapu	22.0	33.0	28.0	31.0	28.0	500.0	40.0	36.0	25.0	24.0
Guam	11.0	20.0	21.0	18.0	13.0	35.0	500.0	27.0	12.0	12.0
Manila	17.0	25.0	23.0	17.0	28.0	25.0	25.0	500.0	38.0	35.0
Songkh	3.0	4.0	6.0	-6.0	16.0	12.0	4.0	33.0	500.0	38.0
Cocos	11.0	11.0	13.0	-7.0	20.0	-2.0	6.0	23.0	31.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	Townsv	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	34.0	55.0	44.0	40.0	27.0	29.0	28.0	23.0	37.0
Darwin	42.0	500.0	51.0	43.0	55.0	49.0	47.0	49.0	41.0	49.0
ASprin	58.0	46.0	500.0	50.0	49.0	36.0	41.0	41.0	36.0	42.0
Townsv	50.0	40.0	53.0	500.0	38.0	45.0	44.0	44.0	36.0	30.0
Derby	44.0	51.0	50.0	36.0	500.0	38.0	44.0	44.0	40.0	50.0
Jayapu	37.0	49.0	42.0	47.0	44.0	500.0	54.0	51.0	44.0	46.0
Guam	39.0	41.0	42.0	43.0	42.0	49.0	500.0	46.0	34.0	39.0
Manila	39.0	43.0	41.0	40.0	45.0	43.0	46.0	500.0	50.0	49.0
Songkh	35.0	30.0	34.0	25.0	35.0	35.0	34.0	47.0	500.0	51.0
Cocos	31.0	34.0	34.0	19.0	41.0	31.0	36.0	42.0	47.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	Townsv	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	46.0	62.0	54.0	51.0	40.0	42.0	39.0	36.0	47.0
Darwin	52.0	500.0	60.0	53.0	62.0	57.0	53.0	53.0	46.0	56.0
ASprin	64.0	55.0	500.0	59.0	58.0	48.0	48.0	47.0	44.0	51.0
Townsv	59.0	51.0	61.0	500.0	49.0	55.0	51.0	49.0	43.0	42.0
Derby	54.0	58.0	59.0	48.0	500.0	50.0	50.0	52.0	45.0	57.0
Jayapu	47.0	57.0	53.0	56.0	53.0	500.0	58.0	55.0	49.0	53.0
Guam	49.0	51.0	50.0	51.0	51.0	56.0	500.0	54.0	45.0	49.0
Manila	49.0	51.0	49.0	49.0	53.0	53.0	54.0	500.0	55.0	54.0
Songkh	45.0	41.0	44.0	40.0	44.0	44.0	45.0	53.0	500.0	56.0
Cocos	44.0	46.0	46.0	35.0	52.0	44.0	45.0	47.0	51.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	Townsv	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	54.0	67.0	61.0	58.0	48.0	49.0	46.0	43.0	52.0
Darwin	60.0	500.0	66.0	60.0	67.0	64.0	57.0	56.0	48.0	60.0

ASprin	69.0	62.0	500.0	65.0	64.0	56.0	52.0	50.0	48.0	56.0
TownsV	65.0	58.0	67.0	500.0	57.0	62.0	55.0	52.0	47.0	49.0
Derby	61.0	64.0	65.0	57.0	500.0	57.0	54.0	55.0	48.0	62.0
Jayapu	54.0	63.0	60.0	63.0	60.0	500.0	60.0	56.0	51.0	58.0
Guam	55.0	57.0	56.0	58.0	57.0	61.0	500.0	57.0	51.0	55.0
Manila	55.0	57.0	56.0	55.0	59.0	58.0	58.0	500.0	58.0	57.0
Songkh	52.0	47.0	51.0	48.0	50.0	52.0	51.0	56.0	500.0	60.0
Cocos	52.0	55.0	55.0	46.0	59.0	52.0	49.0	50.0	54.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	60.0	63.0	66.0	62.0	54.0	53.0	50.0	48.0	56.0
Darwin	64.0	500.0	69.0	66.0	70.0	67.0	60.0	58.0	51.0	63.0
ASprin	64.0	67.0	500.0	70.0	68.0	62.0	56.0	53.0	51.0	60.0
TownsV	68.0	64.0	70.0	500.0	62.0	66.0	58.0	54.0	50.0	54.0
Derby	64.0	68.0	69.0	63.0	500.0	63.0	57.0	58.0	51.0	66.0
Jayapu	58.0	66.0	64.0	67.0	64.0	500.0	63.0	58.0	53.0	61.0
Guam	58.0	61.0	60.0	61.0	60.0	64.0	500.0	61.0	55.0	57.0
Manila	58.0	61.0	60.0	60.0	63.0	62.0	63.0	500.0	61.0	59.0
Songkh	55.0	52.0	55.0	54.0	54.0	56.0	56.0	60.0	500.0	63.0
Cocos	56.0	60.0	59.0	53.0	64.0	58.0	53.0	52.0	58.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	63.0	45.0	69.0	65.0	62.0	57.0	54.0	53.0	57.0
Darwin	65.0	500.0	71.0	68.0	67.0	69.0	64.0	60.0	53.0	66.0
ASprin	46.0	70.0	500.0	67.0	70.0	65.0	59.0	57.0	54.0	61.0
TownsV	69.0	67.0	67.0	500.0	65.0	68.0	63.0	56.0	53.0	57.0
Derby	66.0	66.0	71.0	66.0	500.0	66.0	59.0	62.0	53.0	66.0
Jayapu	64.0	68.0	67.0	68.0	66.0	500.0	66.0	61.0	55.0	63.0
Guam	60.0	64.0	61.0	65.0	60.0	67.0	500.0	65.0	59.0	58.0
Manila	59.0	62.0	61.0	60.0	65.0	64.0	67.0	500.0	65.0	64.0
Songkh	57.0	55.0	57.0	56.0	56.0	57.0	60.0	64.0	500.0	65.0
Cocos	57.0	64.0	61.0	57.0	66.0	61.0	56.0	60.0	61.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	66.0	17.0	60.0	66.0	64.0	59.0	58.0	55.0	43.0
Darwin	66.0	500.0	66.0	70.0	62.0	70.0	64.0	64.0	39.0	66.0
ASprin	18.0	65.0	500.0	59.0	63.0	66.0	60.0	58.0	55.0	60.0
TownsV	60.0	69.0	60.0	500.0	67.0	69.0	65.0	58.0	54.0	59.0
Derby	66.0	62.0	63.0	67.0	500.0	66.0	60.0	63.0	53.0	67.0
Jayapu	65.0	69.0	67.0	69.0	67.0	500.0	56.0	64.0	40.0	62.0
Guam	60.0	64.0	61.0	66.0	61.0	56.0	500.0	66.0	62.0	57.0
Manila	59.0	64.0	60.0	60.0	64.0	65.0	67.0	500.0	67.0	64.0

Songkh	57.0	39.0	57.0	56.0	56.0	41.0	62.0	67.0	500.0	65.0
Cocos	43.0	65.0	60.0	59.0	66.0	62.0	56.0	63.0	64.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	66.0	-14.0	43.0	55.0	64.0	59.0	57.0	55.0	13.0
Darwin	66.0	500.0	58.0	70.0	53.0	63.0	65.0	65.0	19.0	66.0
ASprin	-14.0	58.0	500.0	46.0	53.0	68.0	59.0	55.0	51.0	57.0
TownsV	43.0	70.0	46.0	500.0	68.0	69.0	64.0	44.0	39.0	58.0
Derby	56.0	53.0	54.0	68.0	500.0	67.0	44.0	64.0	35.0	66.0
Jayapu	65.0	63.0	68.0	69.0	68.0	500.0	40.0	54.0	13.0	61.0
Guam	59.0	65.0	60.0	65.0	41.0	40.0	500.0	68.0	62.0	38.0
Manila	58.0	64.0	56.0	42.0	64.0	54.0	68.0	500.0	69.0	64.0
Songkh	56.0	19.0	52.0	39.0	34.0	13.0	62.0	69.0	500.0	65.0
Cocos	20.0	65.0	57.0	58.0	66.0	60.0	38.0	63.0	65.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	56.0	-13.0	15.0	37.0	64.0	57.0	53.0	49.0	54.0
Darwin	57.0	500.0	46.0	62.0	39.0	56.0	63.0	56.0	58.0	65.0
ASprin	-13.0	45.0	500.0	26.0	38.0	68.0	40.0	35.0	31.0	35.0
TownsV	15.0	62.0	26.0	500.0	67.0	68.0	64.0	29.0	24.0	57.0
Derby	45.0	39.0	38.0	67.0	500.0	68.0	63.0	64.0	17.0	66.0
Jayapu	65.0	56.0	68.0	69.0	68.0	500.0	15.0	40.0	20.0	60.0
Guam	58.0	64.0	36.0	65.0	63.0	15.0	500.0	68.0	61.0	12.0
Manila	55.0	55.0	29.0	18.0	63.0	40.0	68.0	500.0	69.0	63.0
Songkh	51.0	58.0	28.0	18.0	11.0	20.0	61.0	69.0	500.0	64.0
Cocos	54.0	64.0	34.0	57.0	66.0	59.0	12.0	63.0	64.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	42.0	-13.0	-17.0	10.0	64.0	40.0	35.0	31.0	-999.0
Darwin	48.0	500.0	28.0	55.0	24.0	46.0	54.0	44.0	48.0	65.0
ASprin	-13.0	28.0	500.0	5.0	18.0	67.0	25.0	17.0	13.0	13.0
TownsV	-17.0	55.0	5.0	500.0	59.0	59.0	63.0	57.0	2.0	49.0
Derby	27.0	24.0	18.0	59.0	500.0	67.0	61.0	57.0	57.0	65.0
Jayapu	64.0	46.0	67.0	59.0	67.0	500.0	-13.0	17.0	-91.0	46.0
Guam	39.0	52.0	11.0	63.0	61.0	-13.0	500.0	67.0	60.0	-29.0
Manila	32.0	44.0	-2.0	57.0	56.0	17.0	67.0	500.0	69.0	60.0
Songkh	29.0	48.0	2.0	-14.0	57.0	-91.0	59.0	69.0	500.0	53.0
Cocos	-74.0	64.0	8.0	49.0	65.0	46.0	-29.0	60.0	53.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	20.0	51.0	43.0	28.0	21.0	6.0	2.0	10.0	30.0
Darwin	34.0	500.0	45.0	44.0	48.0	43.0	32.0	34.0	16.0	33.0
ASprin	57.0	37.0	500.0	49.0	40.0	27.0	22.0	21.0	2.0	26.0
TownsV	49.0	37.0	50.0	500.0	25.0	39.0	25.0	20.0	3.0	28.0
Derby	38.0	44.0	45.0	29.0	500.0	28.0	27.0	25.0	13.0	35.0
Jayapu	32.0	40.0	32.0	43.0	30.0	500.0	42.0	32.0	13.0	29.0
Guam	16.0	28.0	26.0	26.0	25.0	41.0	500.0	32.0	18.0	18.0
Manila	10.0	26.0	23.0	15.0	29.0	27.0	31.0	500.0	37.0	32.0
Songkh	17.0	5.0	-1.0	3.0	9.0	7.0	15.0	35.0	500.0	32.0
Cocos	30.0	19.0	18.0	21.0	24.0	6.0	9.0	23.0	23.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	39.0	57.0	50.0	43.0	35.0	29.0	32.0	26.0	40.0
Darwin	48.0	500.0	56.0	51.0	56.0	53.0	48.0	51.0	41.0	49.0
ASprin	61.0	51.0	500.0	56.0	53.0	42.0	41.0	43.0	37.0	45.0
TownsV	55.0	46.0	56.0	500.0	42.0	50.0	44.0	44.0	36.0	36.0
Derby	49.0	54.0	55.0	44.0	500.0	44.0	45.0	49.0	40.0	51.0
Jayapu	43.0	52.0	47.0	53.0	46.0	500.0	54.0	51.0	42.0	47.0
Guam	35.0	44.0	40.0	44.0	43.0	51.0	500.0	50.0	40.0	39.0
Manila	39.0	45.0	42.0	42.0	46.0	46.0	49.0	500.0	50.0	48.0
Songkh	30.0	29.0	31.0	24.0	33.0	33.0	38.0	49.0	500.0	51.0
Cocos	36.0	38.0	38.0	29.0	43.0	37.0	38.0	44.0	46.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	50.0	63.0	57.0	53.0	47.0	43.0	47.0	43.0	50.0
Darwin	56.0	500.0	62.0	57.0	63.0	60.0	56.0	59.0	50.0	58.0
ASprin	66.0	58.0	500.0	62.0	60.0	53.0	49.0	53.0	49.0	53.0
TownsV	61.0	54.0	63.0	500.0	53.0	58.0	53.0	54.0	47.0	48.0
Derby	57.0	61.0	62.0	54.0	500.0	54.0	53.0	57.0	49.0	60.0
Jayapu	54.0	59.0	55.0	59.0	55.0	500.0	60.0	60.0	52.0	56.0
Guam	48.0	53.0	50.0	52.0	52.0	58.0	500.0	60.0	51.0	52.0
Manila	49.0	53.0	51.0	51.0	55.0	55.0	58.0	500.0	59.0	56.0
Songkh	46.0	44.0	47.0	41.0	46.0	46.0	49.0	59.0	500.0	59.0
Cocos	47.0	49.0	50.0	42.0	54.0	48.0	48.0	53.0	55.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	58.0	59.0	64.0	60.0	56.0	52.0	54.0	52.0	55.0
Darwin	62.0	500.0	68.0	64.0	68.0	64.0	61.0	64.0	55.0	63.0
ASprin	61.0	65.0	500.0	67.0	67.0	60.0	56.0	59.0	55.0	59.0
TownsV	66.0	62.0	68.0	500.0	60.0	63.0	57.0	60.0	53.0	54.0

Derby	62.0	66.0	67.0	60.0	500.0	61.0	58.0	62.0	55.0	65.0
Jayapu	59.0	63.0	62.0	64.0	62.0	500.0	63.0	65.0	58.0	60.0
Guam	55.0	59.0	56.0	57.0	58.0	62.0	500.0	65.0	58.0	57.0
Manila	55.0	60.0	57.0	57.0	60.0	61.0	63.0	500.0	64.0	60.0
Songkh	53.0	52.0	54.0	51.0	53.0	55.0	56.0	65.0	500.0	63.0
Cocos	53.0	58.0	56.0	51.0	62.0	56.0	54.0	59.0	61.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	63.0	29.0	65.0	64.0	60.0	56.0	57.0	55.0	55.0
Darwin	64.0	500.0	69.0	67.0	63.0	68.0	64.0	66.0	58.0	65.0
ASprin	30.0	67.0	500.0	61.0	65.0	64.0	58.0	60.0	57.0	59.0
TownsV	66.0	67.0	61.0	500.0	64.0	66.0	59.0	61.0	57.0	56.0
Derby	65.0	62.0	65.0	64.0	500.0	64.0	59.0	65.0	58.0	66.0
Jayapu	62.0	67.0	65.0	66.0	65.0	500.0	66.0	66.0	60.0	62.0
Guam	57.0	63.0	58.0	58.0	59.0	66.0	500.0	65.0	60.0	59.0
Manila	58.0	64.0	59.0	60.0	64.0	65.0	64.0	500.0	67.0	61.0
Songkh	56.0	56.0	57.0	56.0	57.0	59.0	59.0	67.0	500.0	65.0
Cocos	55.0	63.0	59.0	55.0	65.0	60.0	58.0	61.0	64.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	64.0	-12.0	44.0	57.0	62.0	56.0	58.0	55.0	34.0
Darwin	64.0	500.0	58.0	68.0	50.0	61.0	64.0	64.0	58.0	65.0
ASprin	-12.0	57.0	500.0	46.0	56.0	66.0	57.0	59.0	58.0	58.0
TownsV	44.0	68.0	46.0	500.0	66.0	67.0	63.0	59.0	58.0	57.0
Derby	58.0	49.0	56.0	66.0	500.0	66.0	59.0	65.0	58.0	65.0
Jayapu	63.0	61.0	66.0	68.0	66.0	500.0	60.0	65.0	59.0	60.0
Guam	56.0	63.0	57.0	62.0	58.0	60.0	500.0	66.0	60.0	58.0
Manila	58.0	64.0	59.0	58.0	65.0	65.0	66.0	500.0	68.0	60.0
Songkh	56.0	58.0	58.0	58.0	58.0	59.0	58.0	68.0	500.0	65.0
Cocos	37.0	64.0	58.0	56.0	64.0	60.0	58.0	60.0	65.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	55.0	-12.0	6.0	36.0	62.0	53.0	57.0	53.0	-18.0
Darwin	55.0	500.0	42.0	58.0	28.0	50.0	64.0	64.0	57.0	64.0
ASprin	-12.0	41.0	500.0	22.0	37.0	66.0	35.0	54.0	57.0	39.0
TownsV	6.0	58.0	22.0	500.0	65.0	59.0	62.0	54.0	57.0	54.0
Derby	46.0	28.0	37.0	65.0	500.0	66.0	37.0	64.0	56.0	66.0
Jayapu	63.0	50.0	66.0	59.0	66.0	500.0	51.0	65.0	57.0	59.0
Guam	52.0	63.0	37.0	62.0	39.0	51.0	500.0	65.0	58.0	56.0
Manila	56.0	64.0	53.0	54.0	64.0	65.0	65.0	500.0	68.0	45.0
Songkh	54.0	57.0	58.0	58.0	57.0	59.0	56.0	68.0	500.0	65.0
Cocos	6.0	63.0	38.0	54.0	65.0	59.0	56.0	45.0	65.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	Townsv	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	42.0	-11.0	-36.0	-2.0	61.0	29.0	49.0	44.0	-999.0
Darwin	42.0	500.0	19.0	45.0	5.0	30.0	61.0	63.0	33.0	64.0
ASprin	-11.0	19.0	500.0	-3.0	13.0	57.0	5.0	28.0	54.0	60.0
Townsv	-36.0	45.0	-3.0	500.0	52.0	48.0	55.0	28.0	54.0	36.0
Derby	25.0	5.0	13.0	52.0	500.0	59.0	7.0	63.0	36.0	65.0
Jayapu	61.0	30.0	57.0	48.0	59.0	500.0	34.0	62.0	38.0	44.0
Guam	32.0	60.0	14.0	55.0	16.0	34.0	500.0	54.0	42.0	51.0
Manila	48.0	63.0	31.0	32.0	63.0	62.0	54.0	500.0	68.0	20.0
Songkh	45.0	33.0	56.0	56.0	33.0	36.0	42.0	68.0	500.0	65.0
Cocos	-44.0	64.0	61.0	36.0	65.0	44.0	51.0	20.0	65.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	Townsv	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	22.0	-11.0	-38.0	-44.0	52.0	0.0	25.0	13.0	-999.0
Darwin	22.0	500.0	-4.0	26.0	2.0	5.0	47.0	54.0	3.0	62.0
ASprin	-11.0	-4.0	500.0	-10.0	-11.0	45.0	52.0	-3.0	34.0	54.0
Townsv	-38.0	26.0	-10.0	500.0	38.0	29.0	45.0	42.0	37.0	15.0
Derby	-2.0	2.0	-11.0	38.0	500.0	49.0	53.0	56.0	17.0	56.0
Jayapu	52.0	5.0	45.0	29.0	49.0	500.0	12.0	51.0	19.0	25.0
Guam	9.0	49.0	52.0	47.0	53.0	12.0	500.0	42.0	24.0	32.0
Manila	28.0	54.0	8.0	43.0	56.0	51.0	42.0	500.0	59.0	62.0
Songkh	22.0	3.0	32.0	36.0	2.0	4.0	31.0	59.0	500.0	64.0
Cocos	-999.0	62.0	54.0	15.0	57.0	25.0	32.0	62.0	63.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	Townsv	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-4.0	-10.0	-37.0	-55.0	42.0	-43.0	-3.0	-37.0	-999.0
Darwin	-4.0	500.0	-15.0	3.0	2.0	-19.0	32.0	45.0	-45.0	55.0
ASprin	-10.0	-15.0	500.0	-10.0	-18.0	28.0	41.0	-47.0	12.0	46.0
Townsv	-37.0	3.0	-10.0	500.0	19.0	6.0	28.0	-49.0	17.0	-18.0
Derby	-31.0	2.0	-18.0	19.0	500.0	34.0	43.0	46.0	34.0	47.0
Jayapu	41.0	-19.0	28.0	6.0	34.0	500.0	-13.0	39.0	-10.0	54.0
Guam	-23.0	37.0	43.0	34.0	45.0	-13.0	500.0	26.0	-1.0	11.0
Manila	7.0	45.0	-25.0	-26.0	46.0	39.0	26.0	500.0	54.0	52.0
Songkh	-7.0	-45.0	5.0	11.0	17.0	-44.0	16.0	54.0	500.0	53.0
Cocos	-999.0	55.0	45.0	-18.0	49.0	54.0	11.0	52.0	54.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	Townsv	Derby	Jayapu	Guam	Manila	Songkh	Cocos
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Adelad	500.0	-65.0	1.0	-21.0	-49.0	-999.0	-999.0	-999.0	-999.0	-59.0
Darwin	-63.0	500.0	13.0	-5.0	36.0	8.0	-54.0	-20.0	-15.0	-5.0
ASprin	2.0	12.0	500.0	-3.0	15.0	-62.0	-999.0	-67.0	-59.0	-37.0
TownsV	-21.0	-7.0	-3.0	500.0	-56.0	-65.0	-999.0	-999.0	-999.0	-85.0
Derby	-48.0	35.0	17.0	-55.0	500.0	-34.0	-83.0	-17.0	-3.0	11.0
Jayapu	-99.0	7.0	-62.0	-65.0	-34.0	500.0	6.0	-24.0	-37.0	-36.0
Guam	-999.0	-53.0	-999.0	-999.0	-81.0	8.0	500.0	-5.0	-16.0	-45.0
Manila	-999.0	-12.0	-70.0	-999.0	-8.0	-13.0	4.0	500.0	34.0	15.0
Songkh	-95.0	-6.0	-50.0	-87.0	7.0	-18.0	-3.0	34.0	500.0	29.0
Cocos	-55.0	-3.0	-31.0	-78.0	14.0	-34.0	-43.0	8.0	22.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	15.0	51.0	30.0	22.0	-7.0	-33.0	-17.0	-20.0	9.0
Darwin	20.0	500.0	51.0	37.0	59.0	49.0	23.0	30.0	19.0	34.0
ASprin	53.0	49.0	500.0	49.0	50.0	21.0	2.0	10.0	3.0	23.0
TownsV	31.0	35.0	48.0	500.0	18.0	32.0	5.0	2.0	-12.0	-3.0
Derby	26.0	59.0	52.0	21.0	500.0	32.0	20.0	31.0	25.0	42.0
Jayapu	-3.0	48.0	22.0	33.0	30.0	500.0	45.0	24.0	9.0	21.0
Guam	-45.0	13.0	-5.0	-8.0	18.0	45.0	500.0	37.0	25.0	15.0
Manila	-13.0	32.0	15.0	0.0	32.0	33.0	44.0	500.0	50.0	40.0
Songkh	-7.0	25.0	8.0	-2.0	26.0	28.0	34.0	49.0	500.0	47.0
Cocos	15.0	35.0	27.0	4.0	43.0	24.0	17.0	35.0	44.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	36.0	63.0	52.0	40.0	26.0	11.0	16.0	14.0	35.0
Darwin	39.0	500.0	62.0	55.0	65.0	60.0	42.0	44.0	38.0	48.0
ASprin	64.0	60.0	500.0	61.0	60.0	40.0	31.0	33.0	32.0	40.0
TownsV	53.0	53.0	61.0	500.0	37.0	52.0	33.0	28.0	24.0	25.0
Derby	42.0	65.0	62.0	39.0	500.0	50.0	40.0	45.0	40.0	54.0
Jayapu	29.0	60.0	41.0	53.0	49.0	500.0	59.0	42.0	35.0	41.0
Guam	3.0	38.0	26.0	27.0	40.0	60.0	500.0	50.0	43.0	35.0
Manila	18.0	47.0	34.0	29.0	48.0	49.0	55.0	500.0	56.0	49.0
Songkh	21.0	41.0	34.0	29.0	42.0	44.0	45.0	54.0	500.0	55.0
Cocos	38.0	48.0	42.0	29.0	54.0	42.0	36.0	45.0	53.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	52.0	68.0	60.0	55.0	40.0	30.0	35.0	32.0	44.0
Darwin	53.0	500.0	65.0	61.0	69.0	64.0	51.0	55.0	48.0	55.0
ASprin	69.0	65.0	500.0	67.0	65.0	54.0	42.0	45.0	45.0	49.0
TownsV	61.0	61.0	67.0	500.0	53.0	61.0	45.0	44.0	40.0	40.0
Derby	56.0	69.0	65.0	54.0	500.0	57.0	48.0	55.0	49.0	60.0
Jayapu	42.0	63.0	54.0	61.0	57.0	500.0	65.0	54.0	48.0	51.0



Guam	23.0	50.0	40.0	44.0	51.0	67.0	500.0	59.0	51.0	47.0
Manila	36.0	56.0	46.0	45.0	57.0	57.0	60.0	500.0	61.0	54.0
Songkh	34.0	49.0	45.0	42.0	50.0	50.0	49.0	59.0	500.0	60.0
Cocos	46.0	54.0	49.0	41.0	59.0	51.0	45.0	51.0	60.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	57.0	62.0	65.0	59.0	51.0	42.0	46.0	46.0	49.0
Darwin	58.0	500.0	69.0	63.0	57.0	66.0	57.0	61.0	52.0	60.0
ASprin	63.0	69.0	500.0	69.0	69.0	59.0	49.0	52.0	51.0	52.0
TownsV	65.0	63.0	70.0	500.0	59.0	62.0	51.0	51.0	48.0	47.0
Derby	60.0	57.0	69.0	59.0	500.0	61.0	54.0	60.0	53.0	61.0
Jayapu	53.0	66.0	60.0	62.0	62.0	500.0	65.0	59.0	52.0	56.0
Guam	38.0	53.0	48.0	52.0	55.0	66.0	500.0	64.0	55.0	52.0
Manila	46.0	61.0	52.0	51.0	60.0	61.0	63.0	500.0	57.0	54.0
Songkh	47.0	52.0	50.0	47.0	52.0	52.0	50.0	56.0	500.0	62.0
Cocos	49.0	60.0	52.0	48.0	61.0	54.0	50.0	54.0	62.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	61.0	51.0	67.0	63.0	56.0	49.0	51.0	50.0	37.0
Darwin	61.0	500.0	61.0	67.0	36.0	62.0	62.0	62.0	48.0	60.0
ASprin	51.0	60.0	500.0	58.0	58.0	62.0	53.0	55.0	53.0	52.0
TownsV	68.0	67.0	58.0	500.0	62.0	65.0	59.0	54.0	51.0	50.0
Derby	63.0	36.0	58.0	62.0	500.0	63.0	56.0	61.0	38.0	63.0
Jayapu	58.0	62.0	62.0	65.0	63.0	500.0	72.0	60.0	55.0	56.0
Guam	45.0	59.0	50.0	56.0	56.0	72.0	500.0	64.0	33.0	53.0
Manila	51.0	61.0	55.0	53.0	60.0	62.0	64.0	500.0	50.0	32.0
Songkh	48.0	48.0	50.0	48.0	38.0	50.0	38.0	49.0	500.0	62.0
Cocos	37.0	60.0	52.0	50.0	63.0	55.0	52.0	29.0	62.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	63.0	31.0	58.0	56.0	58.0	51.0	52.0	45.0	16.0
Darwin	64.0	500.0	47.0	68.0	11.0	42.0	62.0	63.0	23.0	61.0
ASprin	31.0	47.0	500.0	47.0	45.0	64.0	55.0	35.0	32.0	26.0
TownsV	58.0	68.0	47.0	500.0	64.0	67.0	59.0	55.0	48.0	51.0
Derby	55.0	11.0	45.0	64.0	500.0	65.0	37.0	62.0	11.0	63.0
Jayapu	59.0	42.0	64.0	67.0	65.0	500.0	74.0	64.0	9.0	54.0
Guam	47.0	58.0	56.0	54.0	37.0	74.0	500.0	66.0	-41.0	53.0
Manila	53.0	63.0	36.0	56.0	62.0	64.0	66.0	500.0	37.0	57.0
Songkh	41.0	22.0	34.0	43.0	17.0	26.0	24.0	37.0	500.0	60.0
Cocos	12.0	61.0	26.0	49.0	63.0	51.0	48.0	58.0	60.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	53.0	7.0	47.0	46.0	60.0	52.0	27.0	1.0	-19.0
Darwin	53.0	500.0	36.0	52.0	-2.0	6.0	63.0	54.0	-9.0	60.0
ASprin	7.0	36.0	500.0	38.0	33.0	65.0	15.0	-15.0	-23.0	56.0
TownsV	47.0	52.0	38.0	500.0	57.0	52.0	61.0	15.0	5.0	22.0
Derby	39.0	-2.0	33.0	57.0	500.0	58.0	-13.0	53.0	-37.0	52.0
Jayapu	61.0	6.0	65.0	50.0	58.0	500.0	63.0	65.0	-70.0	7.0
Guam	53.0	62.0	18.0	58.0	-13.0	63.0	500.0	66.0	-999.0	10.0
Manila	28.0	54.0	-9.0	17.0	53.0	65.0	66.0	500.0	18.0	48.0
Songkh	19.0	-9.0	13.0	22.0	-19.0	-4.0	2.0	18.0	500.0	48.0
Cocos	-32.0	60.0	56.0	25.0	52.0	25.0	22.0	47.0	48.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	38.0	-14.0	33.0	31.0	61.0	20.0	-23.0	-80.0	-67.0
Darwin	38.0	500.0	19.0	36.0	-1.0	-30.0	55.0	35.0	-54.0	51.0
ASprin	-14.0	19.0	500.0	21.0	15.0	46.0	-46.0	-13.0	-999.0	47.0
TownsV	33.0	36.0	21.0	500.0	46.0	28.0	61.0	-51.0	-73.0	-16.0
Derby	12.0	-1.0	15.0	46.0	500.0	41.0	58.0	32.0	-999.0	40.0
Jayapu	61.0	-30.0	46.0	28.0	41.0	500.0	46.0	51.0	-999.0	51.0
Guam	22.0	55.0	-36.0	61.0	58.0	46.0	500.0	50.0	-999.0	-56.0
Manila	-17.0	35.0	-6.0	-41.0	34.0	51.0	50.0	500.0	-4.0	36.0
Songkh	-8.0	-54.0	-20.0	-5.0	-68.0	-48.0	-28.0	-4.0	500.0	35.0
Cocos	-90.0	51.0	47.0	-4.0	38.0	52.0	-12.0	31.0	35.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	14.0	-13.0	11.0	11.0	52.0	-29.0	-999.0	-999.0	-999.0
Darwin	14.0	500.0	-10.0	20.0	-1.0	-30.0	40.0	2.0	-999.0	39.0
ASprin	-13.0	-10.0	500.0	-8.0	-18.0	20.0	52.0	-999.0	-999.0	35.0
TownsV	11.0	20.0	-8.0	500.0	26.0	-7.0	50.0	-999.0	-999.0	-72.0
Derby	-21.0	-1.0	-18.0	26.0	500.0	10.0	42.0	-7.0	-999.0	21.0
Jayapu	51.0	-30.0	20.0	-7.0	10.0	500.0	10.0	30.0	-999.0	-999.0
Guam	-21.0	40.0	52.0	50.0	42.0	10.0	500.0	27.0	-999.0	-999.0
Manila	-91.0	2.0	-999.0	-999.0	-1.0	30.0	27.0	500.0	-27.0	17.0
Songkh	-48.0	-999.0	-66.0	-44.0	-999.0	-999.0	-65.0	-27.0	500.0	15.0
Cocos	-999.0	39.0	35.0	-48.0	18.0	-54.0	-61.0	6.0	15.0	500.0

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 12  
 Sunspot Number = 150.00  
 Required SNR (dB-Hz) for comm = 20.0

Time-of-day (UT) = 2

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			2	234	12349	234579	123456789	123456789	1235689	123568
1 Darwin			4	23457	023456789	2345789	023456789	023456789	0236789	023689
2 ASprin			04	0134	013459	013456789	013456789	0134568	01345679	013456789
3 Townsv				0125	012456	0125679	01245789	01245689	01245678	01245679
4 Derby			12	0129	012356789	01256789	0123589	01235679	2356789	2356789
5 Jayapu				1367	12346789	012346789	012346789	01234679	0234679	0234678
6 Guam				57	1578	2345789	0125789	012345789	01234578	01234578
7 Manilla			8	5689	145689	145689	1235689	0145689	12345689	2345689
8 Songkh			7	79	145679	1245679	012345679	0123679	0134679	1245679
9 Cocos			8	478	012478	012345678	012345678	01345678	012478	123478

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	8	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manilla	8	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 6

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			23	12345	123456	12345679	12345679	12345678	13456789	156789
1 Darwin			23456	0234567	02345679	023456789	023456789	023456789	023456789	0356789
2 ASprin			0134	013456	0134567	013456789	013456789	013456789	13456789	56
3 Townsv			01256	0124567	0124567	012456789	012456789	012456789	012456789	145679
4 Derby			12	012356	01235679	012356789	012356789	012356789	012356789	356789
5 Jayapu		16	1367	0123467	01234678	012346789	012346789	012346789	01234679	012346789
6 Guam		5	57	12357	01234578	012345789	012345789	012345789	012345789	01234578
7 Manila			6	1568	1234568	012345689	012345689	012345689	01245689	01345689
8 Songkh				7	67	1679	012345679	012345679	0134679	0145679
9 Cocos					14	01234578	012345678	12345678	012345678	0134578

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	8	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	23	1234567	12345679	123456789	123456789	123456789	123456789	1345678	1456789	15678
1 Darwin	023456	023456789	023456789	023456789	023456789	023456789	023456789	02345679	023456789	0356789
2 ASprin	0134	01345679	013456789	013456789	013456789	013456789	013456789	13456789	156789	5679
3 Townsv	01256	01245678	012456789	012456789	012456789	012456789	012456789	012456789	1456789	1456789
4 Derby	12	012356789	012356789	012356789	012356789	012356789	012356789	012356789	01356789	356789
5 Jayapu	12367	012346789	012346789	012346789	012346789	012346789	012346789	012346789	01234789	01234789
6 Guam	357	012345789	012345789	012345789	012345789	012345789	012345789	012345789	01234789	0123478
7 Manila	68	012345689	012345689	012345689	012345689	012345689	012345689	012345689	01245689	012345689
8 Songkh		67	12345679	012345679	012345679	012345679	012345679	02345679	012345679	01345679

Step 3 Results for: Month = December, Sunspot # = 150, Required SNR = 20 dB-Hz, 20DEC150.OUT

A-3a-2

9 Cocos 478 012345678 012345678 012345678 012345678 012345678 012345678 012345678 012345678 12345678 12345678 1234578

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	234	123456789	123456789	123456789	123456789	123456789	13456789	1345678	1456789	15678
1 Darwin	023456789	023456789	023456789	023456789	023456789	023456789	023456789	02345679	023456789	023456789
2 ASprin	013459	013456789	013456789	013456789	013456789	013456789	13456789	13456789	13456789	156
3 Townsv	012457	012456789	012456789	012456789	012456789	012456789	012456789	012456789	12456789	145679
4 Derby	01235789	012356789	012356789	012356789	012356789	012356789	012356789	012356789	01235679	01356789
5 Jayapu	012346789	012346789	012346789	012346789	012346789	012346789	012346789	01234679	01234789	012349
6 Guam	1257	012345789	012345789	012345789	012345789	012345789	012345789	012345789	0123478	013478
7 Manila	1245689	012345689	012345689	012345689	012345689	012345689	012345689	012345689	01245689	0134689
8 Songkh	79	012345679	012345679	012345679	012345679	012345679	012345679	0234679	0125679	014679
9 Cocos	478	01245678	012345678	012345678	012345678	012345678	012345678	012345678	01234578	134578

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9

Step 3 Results for: Month = December, Sunspot # = 150, Required SNR = 20 dB-Hz, 20DEC150.OUT



For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad		234	123459	123456789	123456789	123456789	12345678	134567	13456	5
1 Darwin	4	02345679	023456789	023456789	023456789	023456789	02356789	023679	03679	369
2 ASprin		013459	013456789	013456789	013456789	013456789	013456789	13459	359	569
3 Townsv		0125	012456789	012456789	012456789	012456789	012456789	0124569	012456	146
4 Derby	1	012356789	012356789	012356789	012356789	012356789	0235679	023579	35679	369
5 Jayapu		1234679	012346789	012346789	012346789	012346789	01234679	023467	0234679	027
6 Guam		578	12345789	012345789	012345789	012345789	01234579	01357	013457	12347
7 Manila	8	145689	12345689	012345689	012345689	012345689	012345689	014569	14569	56
8 Songkh	79	145679	012345679	012345679	012345679	012345679	01235679	39	9	
9 Cocos	8	124578	012345678	012345678	012345678	012345678	12345678	12345678	124578	12

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 12  
 Sunspot Number = 150.00  
 Required SNR (dB-Hz) for comm = 40.0

Time-of-day (UT) = 2

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad				2	23	234	1234	1239	12359	356
1 Darwin			4	245	2345	234579	02345678	0236789	0236789	2389
2 ASprin				0134	0134	01345	013457	0134568	01345679	1345679
3 Townsv				2	0125	0125	012457	0124569	01245678	0124567
4 Derby			1	12	129	01257	0123589	235679	2356789	2356789
5 Jayapu				16	1367	123467	1234678	234679	023467	023468
6 Guam				5	57	57	578	1578	1234578	0234578
7 Manila				8	568	45689	15689	145689	12345689	2689
8 Songkh				7	79	79	14679	1679	0134679	145679
9 Cocos					48	178	478	1345678	012478	1278

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	5	6	7	7	7	7	7	7	7	7
1 Darwin	8	9	9	9	9	9	9	9	9	9
2 ASprin	8	9	9	9	9	9	9	9	9	9
3 Townsv	8	9	9	9	9	9	9	9	9	9
4 Derby	7	9	9	9	9	9	9	9	9	9
5 Jayapu	7	8	9	9	9	9	9	9	9	9
6 Guam	7	8	8	8	8	8	8	8	8	8
7 Manila	8	8	8	8	8	8	8	8	8	8
8 Songkh	7	8	8	8	8	8	8	8	8	8
9 Cocos	7	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 6

For each Tx node and freq, list the Rx nodes that can be communicated with.



Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			2	23	23	12345	123456	134567	14567	15679
1 Darwin			45	2345	023456	0234567	02345679	023456789	02356789	0356789
2 ASprin			03	0134	01345	013456	0134567	1345679	15	56
3 Townsv			2	0125	012456	012456	0124567	0124568	14569	145679
4 Derby			1	12	125	01235679	01235679	012356789	0356789	356789
5 Jayapu			16	1367	123467	0123467	01234678	01234679	01234679	012346789
6 Guam			5	57	1357	0123457	01234578	01234578	0134578	01234578
7 Manila				56	568	14568	1234568	01245689	0145689	01345689
8 Songkh					7	7	67	1679	14679	014567
9 Cocos							148	124578	134578	0134578

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	6	8	8	8	8	8	8	8	8	8
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	7	8	8	8	8	8	8	8	8	8
3 Townsv	7	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	8	8	8	8	8	8	8	8	8	8
7 Manila	8	9	9	9	9	9	9	9	9	9
8 Songkh	6	7	7	7	7	7	7	7	7	7
9 Cocos	7	8	8	8	8	8	8	8	8	8

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	2	23	1234	123459	12345679	123456789	13456789	145678	156789	5
1 Darwin	24	02345679	02345679	023456789	023456789	023456789	023456789	0235679	0356789	6789
2 ASprin	03	0134	0134567	01345679	013456789	013456789	13456789	156789	56	5679
3 Townsv	02	01256	0124567	01245678	012456789	012456789	012456789	145689	14569	4567
4 Derby		12	01235679	012356789	012356789	012356789	012356789	0235679	356789	356789
5 Jayapu	6	123467	012346789	012346789	012346789	012346789	012346789	0123479	01234789	02348
6 Guam		357	1234578	012345789	012345789	012345789	012345789	0123478	0123478	123478
7 Manila		568	1234568	012345689	012345689	012345689	012345689	01245689	0145689	1234689
8 Songkh		7	67	5679	012345679	012345679	012345679	023679	0145679	145679

Step 3 Results for: Month = December, Sunspot # = 180, Required SNR = 40 dB-Hz, 40DEC180.OUT

A-3b-2

9 Cocos 4 124578 012345678 012345678 012345678 1234578 0134578 12478

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	2	234	1234569	123456789	123456789	123456789	13456789	1345678	156789	156
1 Darwin	4	023456789	023456789	023456789	023456789	023456789	023456789	02345679	02356789	0356789
2 ASprin	0	0134679	013456789	013456789	013456789	013456789	13456789	13456789	156	5
3 Townsv	02	012567	012456789	012456789	012456789	012456789	012456789	01245679	14569	145679
4 Derby		0126789	012356789	012356789	012356789	012356789	012356789	01235679	035679	356789
5 Jayapu	6	12346789	012346789	012346789	012346789	012346789	012346789	01234679	0123479	012349
6 Guam		123457	012345789	012345789	012345789	012345789	012345789	01234578	013478	13478
7 Manila		12345689	012345689	012345689	012345689	012345689	012345689	012345689	0145689	134689
8 Songkh		79	012345679	012345679	012345679	012345679	02345679	02679	01679	14679
9 Cocos		478	01245678	012345678	012345678	012345678	012345678	1234578	0134578	134578

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9



For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad		2	234	123459	123456789	12345678	1345678	13456	5	5
1 Darwin		245	2345679	023456789	023456789	02356789	0235679	03679	69	6
2 ASprin		0134	013459	013456789	013456789	013456789	13456	59	59	6
3 Townsv		2	0125	012456789	012456789	012456789	012456789	01456	46	6
4 Derby		129	01256789	012356789	012356789	0235679	023579	3579	3569	6
5 Jayapu		16	1234679	012346789	012346789	012346789	01234679	023467	024679	0
6 Guam		5	4578	12345789	12345789	01234579	0123579	01357	13457	1234
7 Manila		689	145689	12345689	012345689	01234568	0134569	14569	56	
8 Songkh		79	145679	12345679	012345679	0123579	039	9		
9 Cocos		48	124578	012345678	012345678	1234568	1345678	12478	125	

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	8	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 12  
 Sunspot Number = 150.00  
 Required SNR (dB-Hz) for comm = 60.0

Time-of-day (UT) = 2  
 For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad				2	2	3	3			
1 Darwin				4	4	25	3	3		
2 ASprin				0	034	134			5	
3 Townsv					2	02	01	15		
4 Derby					12	2		9	5	6
5 Jayapu						16		37	24	57
6 Guam						5			7	68
7 Manilla							8	58	68	7
8 Songkh							7	7	79	
9 Cocos								8	8	

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	1	2	2	2	2	2	2	2	2	2
1 Darwin	2	3	4	4	4	4	4	4	4	4
2 ASprin	3	4	5	5	5	5	5	5	5	5
3 Townsv	2	4	4	4	4	4	4	4	4	4
4 Derby	2	3	4	4	4	4	4	4	4	4
5 Jayapu	2	4	6	6	6	6	6	6	6	6
6 Guam	2	2	2	2	2	2	2	2	2	2
7 Manilla	2	3	3	3	3	3	3	3	3	3
8 Songkh	2	2	2	2	2	2	2	2	2	2
9 Cocos	1	1	1	1	1	1	1	1	1	1

Time-of-day (UT) = 6  
 For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad				2	2	3	34	1		5
1 Darwin					24	2345	235	035	367	
2 ASprin				03	0134	134	14	5	5	56
3 Townsv				2	02	0125	015	145	1456	6
4 Derby					12	12	02	35	35	5
5 Jayapu				5		136	136	123467	2346	024
6 Guam					5	5	5	57	157	37
7 Manila								568	68	6
8 Songkh								7	7	
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	2	3	4	5	5	5	5	5	5	5
1 Darwin	4	6	7	7	7	7	7	7	7	7
2 ASprin	4	6	6	6	6	6	6	6	6	6
3 Townsv	4	6	6	6	6	6	6	6	6	6
4 Derby	2	4	5	5	5	5	5	5	5	5
5 Jayapu	6	7	7	7	7	7	7	7	7	7
6 Guam	3	4	4	4	4	4	4	4	4	4
7 Manila	3	3	3	3	3	3	3	3	3	3
8 Songkh	1	1	1	1	1	1	1	1	1	1
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			2	2	3	34	145	15	5	5
1 Darwin			4	245	2345	023459	0359	03679	89	9
2 ASprin		0	0	034	0134	1345	5	5	56	69
3 Townsv			2	02	025	01245	145	456	6	6
4 Derby				12	12	02359	0359	35679	56789	9
5 Jayapu				3	13	01234	0234	0234	024	0
6 Guam					5	3	34	1347	23478	234
7 Manila							45689	14689	4689	289
8 Songkh							7	79	4679	7

Step 3 Results for: Month = December, Sunspot # = 150, Required SNR = 60 dB-Hz, 60DEC150.OUT

A-3c-2

9 Cocos

4 148 1478 1247

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	3	4	5	5	5	5	5	5	5	5
1 Darwin	6	8	9	9	9	9	9	9	9	9
2 ASprin	4	6	7	7	7	7	7	7	7	7
3 Townsv	5	6	6	6	6	6	6	6	6	6
4 Derby	5	8	9	9	9	9	9	9	9	9
5 Jayapu	5	5	5	5	5	5	5	5	5	5
6 Guam	5	6	7	7	7	7	7	7	7	7
7 Manilla	5	6	7	7	7	7	7	7	7	7
8 Songkh	4	4	4	4	4	4	4	4	4	4
9 Cocos	4	5	5	5	5	5	5	5	5	5

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			2	23	1234	1345	1345	15	5	5
1 Darwin			24	023459	0234569	02345679	02345679	035679	369	9
2 ASprin			0	0134	013459	13459	14569	5	5	5
3 Townsv			2	025	01245	012456	012456	1456	1456	6
4 Derby				0129	012359	0123579	01235679	3579	35679	569
5 Jayapu				12346	123469	01234679	0123479	012349	02349	024
6 Guam				5	123457	0123457	0123478	12378	13478	3478
7 Manilla					1234568	12345689	12345689	14689	4689	689
8 Songkh				9	79	679	679	679	679	7
9 Cocos					14	124578	124578	14578	1478	147

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	4	5	5	5	5	5	5	5	5	5
1 Darwin	8	8	8	8	8	8	8	8	8	8
2 ASprin	6	7	7	7	7	7	7	7	7	7

Step 3 Results for: Month = December, Sunspot # = 150, Required SNR = 60 dB-Hz, CODEC150.OUT

A-3c-3





For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			2	23	23	134	1	5	5	
1 Darwin			245	2345	23579	0235679	03679	69		
2 ASprin			0134	0134	0134	15	5	5		
3 Townsv			2	0125	0125	0145	145	6	6	
4 Derby			12	129	02579	03579	3579			
5 Jayapu			1	136	12346	123467	23467	0267	0	
6 Guam			5	5	57	57	57	157	3	
7 Manila				68	1456	1456	1456	56		
8 Songkh				9	9	9	9			
9 Cocos				8	148	148	148	1		

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	3	4	5	5	5	5	5	5	5	5
1 Darwin	7	8	8	8	8	8	8	8	8	8
2 ASprin	4	5	5	5	5	5	5	5	5	5
3 Townsv	4	5	6	6	6	6	6	6	6	6
4 Derby	5	7	7	7	7	7	7	7	7	7
5 Jayapu	6	7	7	7	7	7	7	7	7	7
6 Guam	3	4	4	4	4	4	4	4	4	4
7 Manila	4	5	5	5	5	5	5	5	5	5
8 Songkh	1	1	1	1	1	1	1	1	1	1
9 Cocos	3	3	3	3	3	3	3	3	3	3

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 12  
 Sunspot Number = 150.00  
 Required SNR (dB-Hz) for comm = 80.0

Time-of-day (UT) = 2

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 6

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										

Step 3 Results for: Month = December, Sunspot # = 150, Required SNR = 80 dB-Hz, 80DEC150.OUT

A-3d-2

# 9 Cocos

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0

3 Townsv	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 18

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 22

Step 3 Results for: Month = December, Sunspot # = 150, Required SNR = 80 dB-Hz, 30DEC150.OUT

A-3d-4

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 12  
 Sunspot Number = 50.00

TX LOCATION = -34.87, 138.50

RX LOCATION = -12.33, 130.83

2.0	22.1	17.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	54.	****	-60.	5.	33.	30.	55.	59.	49.	34.	12.		SNR
6.0	25.5	20.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	58.	****	-20.	17.	37.	43.	54.	59.	62.	52.	39.		SNR
10.0	21.9	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	55.	15.	31	43.	50.	54.	57.	58.	49.	38.	19.		SNR
14.0	22.3	17.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	63.	20.	34.	46.	54.	59.	63.	63.	51.	33.	4.		SNR
18.0	16.0	12.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	58.	23.	39.	50.	57.	61.	52.	41.	24.	3.	-21.		SNR
22.0	19.2	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	59.	-25.	25.	41.	54.	59.	62.	45.	8.	-45.	-90.		SNR

TX LOCATION = -34.87, 138.50

RX LOCATION = -23.67, 135.83

2.0	15.8	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	66.	-50.	22.	49.	68.	64.	53.	49.	39.	13.	-44.		SNR
6.0	14.2	12.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	66.	-9.	39.	59.	65.	60.	49.	38.	14.	-22.	-21.		SNR
10.0	13.1	10.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	63.	50.	56.	61.	64.	55.	42.	23.	-18.	-21.	-20.		SNR
14.0	12.7	10.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	64.	43.	55.	62.	66.	52.	21.	-17.	-24.	-23.	-23.		SNR
18.0	9.3	7.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	61.	52.	58.	62.	51.	29.	-1.	-22.	-21.	-21.	-21.		SNR
22.0	12.2	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
72.	67.	27.	56.	67.	72.	56.	36.	-24.	-23.	-23.	-22.		SNR

TX LOCATION = -34.87, 138.50

RX LOCATION = -19.33, 146.83

2.0	19.6	17.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	65.	-76.	2.	35.	49.	61.	66.	50.	49.	45.	37.		SNR
6.0	20.0	16.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	60.	-15.	31.	47.	56.	60.	63.	57.	46.	30.	6.		SNR
10.0	17.2	13.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	61.	40.	45.	54.	58.	63.	57.	47.	35.	16.	-19.		SNR
14.0	17.4	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	33.	44.	54.	61.	66.	60.	43.	12.	-24.	-55.		SNR
18.0	12.4	10.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	61.	44.	51.	58.	63.	51.	33.	5.	-25.	-53.	-53.		SNR
22.0	16.9	13.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	67.	8.	45.	58.	64.	68.	60.	49.	34.	-5.	-58.		SNR

TX LOCATION = -34.87, 138.50

RX LOCATION = -17.30, 123.63

2.0	19.9	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	58.	****	-44.	23.	38.	54.	59.	30.	-28.	-96.	****		SNR
6.0	22.4	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	58.	****	-23.	26.	39.	52.	58.	61.	51.	36.	12.		SNR
10.0	20.6	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

60.	59.	23.	37.	47.	53.	57.	60.	55.	43.	22.	-8.	SNR
14.0	20.0	15.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
58.	63.	29.	40.	50.	58.	62.	64.	54.	36.	6.	-30.	SNR
18.0	14.7	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
61.	61.	30.	44.	53.	61.	56.	45.	27.	1.	-27.	-56.	SNR
22.0	17.4	13.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
62.	59.	-14.	30.	43.	56.	61.	54.	32.	-8.	-54.	-84.	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = -2.47, 140.63												
2.0	29.4	23.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
51.	55.	****	-97.	-20.	14.	33.	41.	51.	55.	57.	50.	SNR
6.0	33.4	26.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
53.	60.	****	-24.	13.	31.	39.	45.	56.	37.	60.	60.	SNR
10.0	26.0	19.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
54.	56.	14.	22.	36.	44.	47.	47.	58.	58.	52.	43.	SNR
14.0	27.7	21.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
57.	63.	15.	27.	41.	49.	54.	56.	35.	62.	59.	47.	SNR
18.0	19.4	15.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
54.	59.	18.	32.	44.	51.	59.	59.	50.	41.	28.	10.	SNR
22.0	23.6	18.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
52.	18.	-51.	12.	35.	42.	48.	21.	58.	51.	29.	-9.	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = 13.45, 144.75												
2.0	23.5	19.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
43.	36.	****	****	-40.	0.	17.	33.	41.	32.	22.	44.	SNR
6.0	30.2	24.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
38.	51.	****	-57.	-3.	16.	27.	37.	45.	51.	53.	48.	SNR
10.0	23.3	18.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
38.	45.	10.	19.	32.	39.	43.	45.	48.	35.	12.	-26.	SNR
14.0	20.3	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
40.	49.	4.	24.	38.	45.	49.	51.	35.	5.	-45.	****	SNR
18.0	14.8	11.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
37.	46.	4.	28.	42.	47.	36.	19.	-9.	-48.	-97.	****	SNR
22.0	21.2	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
41.	44.	-98.	-11.	20.	28.	39.	47.	44.	7.	-47.	****	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = 14.67, 121.05												
2.0	21.5	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
41.	34.	****	****	-28.	7.	26.	35.	42.	25.	44.	-14.	SNR
6.0	26.2	21.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
45.	42.	****	****	-27.	10.	22.	33.	41.	47.	34.	22.	SNR
10.0	25.4	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
38.	46.	0.	22.	28.	36.	41.	44.	46.	48.	29.	4.	SNR
14.0	22.0	16.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
39.	48.	5.	27.	38.	44.	47.	49.	47.	25.	-9.	-60.	SNR
18.0	15.9	11.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
38.	50.	7.	32.	45.	50.	47.	28.	5.	-27.	-68.	****	SNR
22.0	18.7	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
34.	45.	-77.	-5.	21.	37.	45.	45.	-10.	****	****	****	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = 17.22, 100.62												
2.0	25.0	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
28.	36.	****	****	-57.	-9.	16.	27.	38.	39.	16.	-13.	SNR
6.0	23.9	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ



	30.	32.	****	****	-56.	-13.	10.	27.	36.	29.	18.	-1.	SNR
10.0	27.2	21.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	36.	49.	-33.	9.	21.	31.	35.	39.	49.	50.	41.	18.	SNR
14.0	24.5	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	37.	50.	3.	24.	35.	39.	47.	50.	50.	43.	19.	-14.	SNR
18.0	16.5	12.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	34.	49.	-1.	25.	39.	49.	46.	27.	6.	-25.	-66.	****	SNR
22.0	14.8	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	26.	27.	-78.	-9.	21.	27.	23.	-88.	****	****	****	****	SNR
TX LOCATION = -34.87, 138.50													
RX LOCATION = -12.20, 96.90													
2.0	19.4	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	23.	40.	****	-99.	-7.	21.	37.	39.	-28.	-50.	****	****	SNR
6.0	20.8	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	36.	****	****	-23.	12.	32.	39.	31.	8.	49.	-93.	SNR
10.0	20.7	16.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	46.	51.	-19.	21.	35.	44.	49.	53.	38.	12.	-31.	-90.	SNR
14.0	19.0	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	41.	55.	21.	37.	47.	53.	55.	53.	22.	-27.	-99.	****	SNR
18.0	14.4	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	47.	54.	21.	40.	50.	54.	37.	12.	-28.	-82.	****	****	SNR
22.0	14.5	11.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	35.	43.	-36.	14.	34.	44.	33.	42.	-19.	-65.	****	****	SNR
TX LOCATION = -12.33, 130.83													
RX LOCATION = -34.87, 138.50													
2.0	22.1	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	60.	55.	****	-59.	6.	34.	31.	56.	60.	50.	40.	23.	SNR
6.0	25.5	20.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	61.	60.	****	-21.	18.	38.	45.	57.	60.	62.	53.	42.	SNR
10.0	21.9	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	63.	60.	31.	39.	48.	54.	59.	62.	63.	52.	39.	19.	SNR
14.0	22.3	17.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	58.	65.	33.	42.	52.	60.	63.	65.	64.	52.	36.	13.	SNR
18.0	16.0	12.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	62.	37.	47.	56.	61.	63.	52.	41.	24.	3.	-21.	SNR
22.0	19.2	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	61.	59.	-23.	30.	44.	55.	60.	62.	45.	8.	-44.	-90.	SNR
TX LOCATION = -12.33, 130.83													
RX LOCATION = -23.67, 135.83													
2.0	17.0	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	68.	-73.	9.	43.	62.	68.	48.	51.	48.	41.	28.	SNR
6.0	19.6	15.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	69.	64.	-24.	30.	48.	61.	63.	68.	62.	53.	38.	17.	SNR
10.0	16.1	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	64.	50.	54.	61.	64.	67.	60.	50.	33.	6.	-20.	SNR
14.0	16.9	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	70.	68.	41.	52.	61.	66.	70.	63.	49.	25.	-3.	-30.	SNR
18.0	12.0	9.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	64.	46.	57.	63.	66.	57.	44.	24.	3.	-19.	-25.	SNR
22.0	13.3	10.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	71.	67.	34.	59.	67.	70.	58.	51.	41.	17.	-27.	-28.	SNR
TX LOCATION = -12.33, 130.83													
RX LOCATION = -19.33, 146.83													
2.0	21.0	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

66.	63.	-97.	-10.	28.	45.	58.	63.	66.	55.	47.	38.	SNR	
6.0	24.8	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	64.	-25.	26.	44.	52.	58.	61.	65.	68.	58.	48.	SNR	
10.0	19.3	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	62.	40.	45.	54.	59.	63.	66.	59.	49.	34.	13.	SNR	
14.0	20.8	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	67.	33.	44.	54.	61.	66.	69.	63.	52.	33.	8.	SNR	
18.0	14.5	11.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	63.	45.	50.	58.	65.	61.	53.	40.	21.	-1.	-23.	SNR	
22.0	17.0	13.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	64.	18.	49.	61.	64.	67.	59.	48.	40.	24.	-8.	SNR	

TX LOCATION = -12.33, 130.83

RX LOCATION = -17.30, 123.63

2.0	13.0	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	67.	-48.	28.	62.	68.	49.	47.	38.	15.	-34.	****	SNR	
6.0	16.8	13.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	66.	-23.	34.	60.	64.	67.	64.	58.	48.	34.	18.	SNR	
10.0	14.2	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	51.	59.	64.	66.	62.	50.	29.	5.	-4.	-3.	SNR	
14.0	14.2	10.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	65.	44.	56.	63.	67.	64.	52.	29.	3.	-7.	-7.	SNR	
18.0	10.2	7.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	61.	48.	58.	63.	61.	54.	39.	20.	1.	-4.	-3.	SNR	
22.0	10.2	8.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	66.	49.	64.	68.	54.	45.	21.	-7.	-7.	-6.	-6.	SNR	

TX LOCATION = -12.33, 130.83

RX LOCATION = -2.47, 140.63

2.0	18.5	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	65.	-98.	-4.	41.	57.	63.	61.	32.	3.	-88.	****	SNR	
6.0	21.2	17.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	63.	-26.	28.	49.	60.	60.	64.	68.	59.	51.	40.	SNR	
10.0	17.6	12.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	59.	39.	51.	57.	60.	62.	59.	49.	31.	7.	-19.	SNR	
14.0	16.7	12.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	62.	36.	50.	57.	61.	66.	59.	43.	18.	-12.	-38.	SNR	
18.0	12.1	9.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	59.	43.	55.	58.	63.	55.	43.	25.	4.	-18.	-36.	SNR	
22.0	14.7	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	27.	55.	63.	65.	61.	27.	-29.	-40.	-39.	-39.	SNR	

TX LOCATION = -12.33, 130.83

RX LOCATION = 13.45, 144.75

2.0	21.5	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	48.	****	-96.	10.	28.	22.	46.	54.	39.	13.	-24.	SNR	
6.0	25.2	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	56.	****	2.	30.	40.	45.	47.	54.	60.	47.	26.	SNR	
10.0	23.7	18.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	54.	25.	43.	50.	51.	52.	53.	57.	54.	44.	27.	SNR	
14.0	20.0	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	57.	25.	45.	52.	55.	57.	59.	51.	34.	5.	-31.	SNR	
18.0	15.3	11.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	56.	30.	47.	53.	57.	57.	46.	32.	13.	-12.	-39.	SNR	
22.0	23.2	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	61.	-24.	31.	47.	54.	59.	60.	61.	49.	18.	-34.	SNR	

TX LOCATION = -12.33, 130.83

RX LOCATION = 14.67, 121.05

2.0	21.1	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	50.	****	-70.	19.	35.	27.	50.	56.	37.	8.	-31.		SNR
6.0	23.9	20.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	53.	****	-44.	23.	38.	42.	46.	54.	52.	37.	9.		SNR
10.0	24.9	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	54.	21.	41.	49.	51.	51.	52.	56.	59.	50.	37.		SNR
14.0	21.4	15.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	56.	31.	47.	53.	54.	55.	58.	59.	45.	25.	-5.		SNR
18.0	16.1	11.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	58.	34.	50.	57.	59.	59.	50.	39.	23.	3.	-21.		SNR
22.0	19.3	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	61.	-5.	33.	47.	55.	59.	61.	44.	18.	-23.	-69.		SNR

TX LOCATION = -12.33, 130.83

RX LOCATION = 17.22, 100.62

2.0	24.7	20.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	22.	****	-51.	-6.	19.	36.	35.	19.	53.	44.	37.		SNR
6.0	25.2	21.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	-17.	****	-78.	-13.	9.	24.	34.	-6.	50.	39.	19.		SNR
10.0	28.0	24.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	1.	-10.	27.	35.	40.	43.	46.	48.	6.	57.	44.		SNR
14.0	19.2	15.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	51.	20.	39.	45.	48.	50.	51.	27.	-9.	-64.	****		SNR
18.0	14.0	10.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	50.	20.	40.	48.	51.	32.	-2.	-58.	****	****	****		SNR
22.0	12.8	9.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	38.	-6.	22.	38.	43.	23.	-6.	-49.	****	****	****		SNR

TX LOCATION = -12.33, 130.83

RX LOCATION = -12.20, 96.90

2.0	25.5	20.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	55.	****	-51.	17.	38.	45.	52.	56.	57.	44.	15.		SNR
6.0	36.6	30.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	59.	****	-89.	-11.	21.	38.	46.	53.	53.	38.	59.		SNR
10.0	33.1	22.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	56.	6.	36.	46.	53.	56.	58.	58.	45.	24.	60.		SNR
14.0	30.5	22.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	44.	35.	49.	56.	60.	61.	61.	57.	63.	62.	59.		SNR
18.0	21.7	16.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	34.	51.	57.	59.	62.	61.	59.	50.	43.	33.		SNR
22.0	18.7	14.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	41.	12.	38.	48.	52.	36.	56.	47.	38.	24.	6.		SNR

TX LOCATION = -23.67, 135.83

RX LOCATION = -34.87, 138.50

2.0	15.8	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	66.	-50.	22.	49.	68.	64.	53.	50.	39.	13.	-44.		SNR
6.0	14.2	12.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	66.	-11.	39.	60.	66.	61.	50.	38.	14.	-22.	-21.		SNR
10.0	13.1	10.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	56.	59.	63.	66.	57.	43.	24.	-17.	-21.	-20.		SNR
14.0	12.7	10.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	67.	48.	58.	65.	68.	54.	22.	-17.	-24.	-23.	-23.		SNR
18.0	9.3	7.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	64.	58.	61.	65.	53.	30.	-1.	-22.	-21.	-21.	-21.		SNR
22.0	12.2	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	72.	68.	28.	58.	68.	72.	56.	37.	-24.	-23.	-23.	-22.	SNR
TX LOCATION	= -23.67, 135.83												
RX LOCATION	= -12.33, 130.83												
2.0	17.0	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	52.	67.	-73.	9.	42.	61.	68.	48.	50.	47.	41.	28.	SNR
6.0	19.6	15.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	63.	-26.	30.	48.	60.	62.	67.	61.	53.	38.	17.	SNR
10.0	16.1	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	64.	61.	39.	48.	57.	61.	64.	56.	46.	30.	5.	-20.	SNR
14.0	16.9	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	64.	33.	47.	56.	63.	67.	61.	48.	25.	-3.	-30.	SNR
18.0	12.0	9.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	64.	60.	38.	52.	59.	64.	56.	44.	24.	2.	-19.	-25.	SNR
22.0	13.3	10.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	71.	66.	33.	57.	66.	69.	58.	51.	40.	17.	-27.	-28.	SNR
TX LOCATION	= -23.67, 135.83												
RX LOCATION	= -19.33, 146.83												
2.0	16.1	14.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	52.	67.	-70.	11.	43.	63.	68.	51.	51.	48.	41.	27.	SNR
6.0	17.2	13.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	63.	-6.	41.	56.	62.	65.	62.	54.	39.	19.	-8.	SNR
10.0	13.9	10.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	63.	48.	54.	62.	65.	61.	53.	43.	26.	-9.	-15.	SNR
14.0	14.8	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	69.	65.	38.	51.	60.	66.	65.	54.	30.	1.	-22.	-22.	SNR
18.0	10.4	8.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	62.	50.	58.	64.	59.	49.	29.	5.	-18.	-19.	-18.	SNR
22.0	12.8	9.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	73.	70.	25.	59.	68.	71.	59.	55.	45.	20.	-19.	-18.	SNR
TX LOCATION	= -23.67, 135.83												
RX LOCATION	= -17.30, 123.63												
2.0	17.2	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	69.	-64.	13.	44.	63.	69.	50.	52.	48.	41.	28.	SNR
6.0	19.1	15.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	64.	-33.	24.	46.	61.	64.	68.	60.	49.	32.	10.	SNR
10.0	16.5	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	63.	45.	56.	59.	62.	65.	59.	49.	31.	5.	-20.	SNR
14.0	16.8	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	69.	66.	39.	50.	59.	65.	68.	61.	46.	22.	-8.	-35.	SNR
18.0	12.1	9.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	62.	41.	54.	61.	66.	56.	43.	23.	1.	-21.	-29.	SNR
22.0	13.1	10.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	70.	66.	35.	57.	65.	69.	57.	49.	35.	3.	-33.	-33.	SNR
TX LOCATION	= -23.67, 135.83												
RX LOCATION	= -2.47, 140.63												
2.0	24.9	20.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	62.	59.	****	-78.	15.	32.	43.	54.	59.	62.	53.	47.	SNR
6.0	29.5	24.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	64.	****	-10.	30.	41.	52.	57.	61.	64.	66.	58.	SNR
10.0	22.9	15.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	63.	57.	21.	36.	46.	53.	57.	60.	62.	56.	45.	26.	SNR
14.0	24.0	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	59.	64.	21.	36.	47.	56.	61.	64.	65.	59.	49.	33.	SNR
18.0	16.9	12.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

62.	60.	26.	43.	52.	59.	63.	56.	49.	37.	22.	3.	SNR	
22.0	19.9	15.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	61.	-24.	29.	44.	56.	60.	63.	50.	14.	-40.	-80.	SNR	
TX LOCATION = -23.67, 135.83													
RX LOCATION = 13.45, 144.75													
2.0	28.3	23.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	22.	****	****	-19.	13.	30.	39.	31.	20.	54.	46.	SNR	
6.0	32.5	26.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	30.	****	-19.	18.	32.	38.	43.	49.	39.	28.	59.	SNR	
10.0	27.0	18.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	45.	18.	35.	44.	45.	45.	46.	33.	9.	56.	44.	SNR	
14.0	23.4	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	50.	12.	38.	47.	50.	52.	40.	11.	51.	37.	15.	SNR	
18.0	13.1	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	49.	23.	41.	48.	50.	32.	8.	-30.	-77.	****	****	SNR	
22.0	25.0	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	18.	-77.	11.	35.	43.	48.	51.	-3.	55.	37.	0.	SNR	
TX LOCATION = -23.67, 135.83													
RX LOCATION = 14.67, 121.05													
2.0	25.9	21.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	23.	****	-94.	-10.	18.	33.	41.	25.	53.	46.	40.	SNR	
6.0	31.1	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	28.	****	-53.	0.	23.	34.	39.	47.	34.	20.	56.	SNR	
10.0	29.0	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	46.	6.	34.	41.	44.	45.	45.	45.	28.	2.	51.	SNR	
14.0	19.2	14.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	50.	19.	40.	46.	49.	50.	50.	29.	-7.	-62.	****	SNR	
18.0	14.0	10.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	53.	23.	43.	51.	54.	38.	17.	-14.	-55.	****	****	SNR	
22.0	16.7	13.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	48.	-47.	16.	36.	46.	51.	18.	35.	****	****	****	SNR	
TX LOCATION = -23.67, 135.83													
RX LOCATION = 17.22, 100.62													
2.0	21.1	17.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	36.	****	-89.	-16.	9.	28.	38.	41.	21.	3.	-23.	SNR	
6.0	21.1	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	30.	****	****	-28.	6.	24.	33.	38.	20.	1.	-28.	SNR	
10.0	24.4	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	44.	-16.	25.	36.	40.	43.	45.	47.	45.	24.	-4.	SNR	
14.0	22.3	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	51.	12.	37.	43.	47.	50.	51.	49.	28.	-4.	-52.	SNR	
18.0	15.6	11.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
36.	51.	10.	37.	47.	51.	45.	23.	-2.	-37.	-83.	****	SNR	
22.0	14.3	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
31.	43.	-34.	12.	35.	43.	16.	****	****	****	****	****	SNR	
TX LOCATION = -23.67, 135.83													
RX LOCATION = -12.20, 96.90													
2.0	25.2	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	51.	****	-56.	3.	26.	40.	43.	7.	53.	40.	14.	SNR	
6.0	33.5	26.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	29.	****	-85.	-16.	16.	34.	41.	46.	48.	26.	3.	SNR	
10.0	22.9	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	55.	-11.	34.	41.	50.	53.	56.	56.	40.	20.	56.	SNR	
14.0	21.6	16.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

52.	59.	27.	42.	51.	56.	59.	59.	55.	30.	-4.	-52.	SNR	
18.0	20.9	16.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	42.	27.	46.	54.	57.	55.	34.	53.	45.	35.	21.	SNR	
22.0	14.4	11.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	48.	-15.	30.	43.	49.	38.	19.	-13.	-57.	****	****	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -34.87, 138.50													
2.0	19.6	17.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	66.	-76.	2.	36.	50.	62.	67.	50.	49.	45.	37.	SNR	
6.0	20.0	16.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	63.	-13.	33.	50.	59.	62.	66.	59.	46.	30.	6.	SNR	
10.0	17.2	13.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	51.	51.	58.	61.	65.	60.	49.	36.	17.	-19.	SNR	
14.0	17.4	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	67.	43.	51.	60.	65.	68.	61.	43.	13.	-24.	-55.	SNR	
18.0	12.4	10.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	51.	55.	62.	65.	52.	33.	5.	-25.	-53.	-53.	SNR	
22.0	16.9	13.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	68.	9.	47.	59.	65.	68.	60.	49.	34.	-5.	-58.	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -12.33, 130.83													
2.0	21.0	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	63.	-98.	-10.	28.	45.	58.	63.	66.	55.	47.	38.	SNR	
6.0	24.8	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	64.	-22.	28.	45.	53.	59.	61.	65.	68.	58.	48.	SNR	
10.0	19.3	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	60.	36.	42.	52.	57.	61.	63.	56.	46.	33.	13.	SNR	
14.0	20.8	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	29.	41.	52.	59.	64.	67.	62.	51.	33.	8.	SNR	
18.0	14.5	11.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	61.	37.	46.	55.	63.	60.	53.	40.	21.	-1.	-23.	SNR	
22.0	17.0	13.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	64.	17.	47.	59.	63.	67.	59.	48.	40.	24.	-8.	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -23.67, 135.83													
2.0	16.1	14.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	68.	-71.	12.	44.	64.	69.	51.	51.	48.	41.	27.	SNR	
6.0	17.2	13.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	65.	-2.	42.	58.	64.	67.	64.	55.	40.	19.	-8.	SNR	
10.0	13.9	10.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	65.	54.	58.	64.	67.	62.	54.	44.	26.	-9.	-15.	SNR	
14.0	14.8	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	67.	43.	54.	62.	68.	66.	54.	30.	1.	-22.	-22.	SNR	
18.0	10.4	8.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	63.	51.	58.	64.	60.	49.	29.	5.	-18.	-19.	-18.	SNR	
22.0	12.8	9.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
73.	70.	25.	58.	68.	71.	60.	55.	45.	20.	-19.	-18.	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -17.30, 123.63													
2.0	23.2	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	56.	****	-65.	4.	32.	41.	55.	60.	55.	47.	34.	SNR	
6.0	27.9	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	62.	****	-17.	23.	38.	45.	57.	61.	64.	64.	53.	SNR	
10.0	22.5	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	63.	59.	27.	39.	47.	53.	57.	60.	63.	55.	45.	29.	SNR
14.0	23.8	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	59.	65.	27.	39.	49.	57.	62.	65.	66.	59.	48.	31.	SNR
18.0	16.8	13.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	62.	62.	29.	42.	53.	60.	64.	56.	47.	33.	15.	-6.	SNR
22.0	19.3	14.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	62.	60.	-19.	27.	41.	55.	60.	63.	47.	13.	-37.	-83.	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = -2.47, 140.63													
2.0	22.9	19.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	62.	****	-20.	28.	45.	56.	60.	64.	58.	53.	46.	SNR
6.0	25.8	21.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	65.	-62.	32.	49.	55.	60.	61.	65.	68.	60.	54.	SNR
10.0	19.9	13.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	64.	59.	38.	48.	55.	58.	60.	63.	57.	46.	26.	-1.	SNR
14.0	20.5	15.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	64.	30.	46.	55.	61.	64.	67.	60.	49.	28.	1.	SNR
18.0	14.4	10.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	64.	60.	41.	51.	57.	62.	59.	52.	39.	22.	1.	-21.	SNR
22.0	18.2	14.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	64.	8.	43.	58.	62.	64.	67.	42.	24.	-12.	-58.	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = 13.45, 144.75													
2.0	26.2	21.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	51.	52.	****	****	-2.	25.	34.	25.	51.	56.	50.	45.	SNR
6.0	29.8	24.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	54.	60.	-93.	7.	33.	41.	47.	51.	55.	60.	61.	54.	SNR
10.0	25.3	17.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	54.	52.	26.	43.	49.	48.	51.	52.	55.	57.	50.	37.	SNR
14.0	21.5	15.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	37.	16.	40.	48.	49.	49.	58.	57.	43.	22.	-8.	SNR
18.0	15.6	11.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	51.	37.	27.	44.	48.	36.	55.	45.	32.	13.	-11.	-38.	SNR
22.0	24.9	19.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	59.	-65.	14.	38.	47.	51.	35.	60.	58.	39.	3.	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = 14.67, 121.05													
2.0	25.0	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	46.	23.	****	****	-11.	18.	30.	39.	22.	50.	43.	36.	SNR
6.0	28.7	23.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	52.	29.	****	-86.	12.	31.	37.	42.	46.	27.	56.	48.	SNR
10.0	20.9	14.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	43.	46.	11.	38.	44.	46.	46.	45.	37.	20.	53.	-63.	SNR
14.0	17.9	13.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	45.	49.	18.	42.	47.	49.	49.	39.	12.	-38.	****	****	SNR
18.0	13.8	10.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	45.	53.	23.	43.	51.	53.	35.	13.	-21.	-66.	****	****	SNR
22.0	18.4	14.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	48.	49.	-75.	9.	32.	44.	50.	50.	-10.	****	****	****	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = 17.22, 100.62													
2.0	23.0	19.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	38.	34.	****	****	-31.	-2.	20.	32.	39.	28.	34.	-4.	SNR
6.0	21.7	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

40.	32.	****	****	-32.	7.	20.	32.	39.	22.	4.	-24.	SNR	
10.0	24.8	17.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	45.	-21.	28.	36.	41.	43.	45.	47.	45.	26.	-2.	SNR	
14.0	21.9	16.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	50.	8.	37.	43.	47.	49.	50.	46.	22.	-15.	-70.	SNR	
18.0	16.4	12.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
35.	51.	8.	33.	46.	51.	47.	27.	4.	-28.	-70.	****	SNR	
22.0	14.8	11.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
28.	40.	-75.	0.	28.	40.	25.	-83.	****	****	****	****	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -12.20, 96.90													
2.0	21.4	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	35.	****	****	-25.	11.	30.	37.	40.	19.	47.	-43.	SNR	
6.0	29.5	23.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
43.	44.	****	****	-45.	2.	19.	34.	42.	45.	48.	34.	SNR	
10.0	25.1	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	53.	-10.	14.	31.	42.	48.	52.	53.	50.	31.	43.	SNR	
14.0	25.3	19.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	56.	16.	29.	41.	50.	54.	56.	56.	52.	31.	4.	SNR	
18.0	18.1	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	55.	19.	35.	48.	54.	55.	47.	26.	4.	-26.	-63.	SNR	
22.0	16.6	12.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	44.	-45.	7.	30.	42.	45.	14.	-71.	****	****	****	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -34.87, 138.50													
2.0	19.9	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	58.	****	-44.	23.	38.	54.	59.	30.	-28.	-96.	****	SNR	
6.0	22.4	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	59.	****	-23.	26.	39.	53.	58.	62.	51.	36.	12.	SNR	
10.0	20.6	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	62.	29.	39.	50.	56.	60.	63.	57.	44.	22.	-7.	SNR	
14.0	20.0	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	64.	36.	44.	54.	61.	64.	65.	55.	40.	14.	-18.	SNR	
18.0	14.7	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	62.	40.	49.	57.	62.	57.	48.	33.	12.	-13.	-39.	SNR	
22.0	17.4	13.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	59.	-13.	34.	46.	57.	61.	54.	23.	-30.	-84.	-84.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -12.33, 130.83													
2.0	13.0	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	66.	-48.	27.	61.	68.	48.	46.	37.	15.	-34.	****	SNR	
6.0	16.8	13.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	64.	-25.	34.	59.	63.	66.	62.	57.	48.	34.	18.	SNR	
10.0	14.2	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	61.	41.	53.	60.	63.	60.	48.	26.	3.	-5.	-4.	SNR	
14.0	14.2	10.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	62.	37.	52.	59.	64.	62.	51.	28.	2.	-8.	-7.	SNR	
18.0	10.2	7.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	59.	44.	56.	61.	59.	53.	38.	20.	1.	-4.	-3.	SNR	
22.0	10.2	8.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	66.	49.	64.	68.	54.	44.	21.	-7.	-7.	-6.	-6.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -23.67, 135.83													
2.0	17.2	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ



53.	69.	-64.	13.	44.	62.	69.	50.	52.	49.	41.	28.	SNR
6.0	19.1	15.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	63.	-34.	24.	46.	60.	63.	67.	60.	49.	32.	10.	SNR
10.0	16.5	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
67.	63.	45.	56.	59.	63.	66.	60.	50.	31.	5.	-20.	SNR
14.0	16.8	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
69.	67.	41.	51.	60.	66.	69.	62.	47.	22.	-8.	-35.	SNR
18.0	12.1	9.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
66.	64.	46.	56.	63.	67.	57.	43.	23.	1.	-21.	-29.	SNR
22.0	13.1	10.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
70.	67.	36.	60.	67.	69.	57.	49.	35.	3.	-33.	-33.	SNR
TX LOCATION = -17.30, 123.63												
RX LOCATION = -19.33, 146.83												
2.0	23.2	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
61.	55.	****	-66.	3.	32.	40.	55.	60.	55.	47.	34.	SNR
6.0	27.9	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
63.	61.	****	-19.	21.	36.	43.	55.	60.	63.	64.	53.	SNR
10.0	22.5	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
63.	59.	21.	36.	45.	53.	57.	61.	63.	56.	45.	29.	SNR
14.0	23.8	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
59.	65.	23.	37.	48.	57.	62.	65.	66.	59.	48.	31.	SNR
18.0	16.8	13.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
62.	62.	32.	44.	54.	60.	63.	55.	47.	33.	15.	-6.	SNR
22.0	19.3	14.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
62.	60.	-18.	30.	44.	56.	60.	63.	47.	13.	-37.	-83.	SNR
TX LOCATION = -17.30, 123.63												
RX LOCATION = -2.47, 140.63												
2.0	23.8	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
61.	58.	****	-74.	20.	37.	51.	54.	60.	61.	51.	44.	SNR
6.0	30.0	24.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
64.	63.	****	-19.	27.	41.	52.	57.	60.	63.	65.	64.	SNR
10.0	24.5	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
63.	58.	18.	37.	48.	54.	57.	59.	62.	63.	52.	38.	SNR
14.0	24.1	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
59.	64.	21.	39.	50.	57.	62.	64.	65.	63.	50.	34.	SNR
18.0	17.2	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
61.	60.	30.	45.	53.	59.	62.	56.	49.	39.	24.	6.	SNR
22.0	19.3	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
62.	61.	-5.	37.	51.	57.	61.	63.	44.	-1.	-59.	-84.	SNR
TX LOCATION = -17.30, 123.63												
RX LOCATION = 13.45, 144.75												
2.0	25.1	20.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
48.	23.	****	****	-1.	24.	34.	27.	22.	54.	46.	40.	SNR
6.0	29.7	24.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
52.	28.	****	-23.	18.	31.	38.	42.	47.	29.	58.	51.	SNR
10.0	26.9	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
56.	46.	15.	38.	45.	47.	46.	46.	31.	57.	53.	44.	SNR
14.0	22.6	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
55.	49.	23.	43.	49.	51.	52.	33.	-4.	48.	31.	5.	SNR
18.0	16.9	12.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
54.	47.	27.	44.	50.	50.	30.	49.	39.	25.	6.	-18.	SNR
22.0	23.4	18.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
53.	18.	-47.	26.	42.	49.	52.	31.	-48.	47.	16.	-37.	SNR
TX LOCATION = -17.30, 123.63												

RX LOCATION = 14.67, 121.05

2.0	23.1	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	52.	****	-66.	17.	35.	43.	50.	56.	50.	44.	35.	SNR	
6.0	27.6	22.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	55.	****	-58.	14.	33.	38.	47.	52.	58.	59.	49.	SNR	
10.0	27.8	19.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	53.	13.	40.	47.	50.	50.	52.	54.	58.	59.	49.	SNR	
14.0	24.0	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	57.	25.	44.	50.	51.	51.	58.	60.	55.	43.	25.	SNR	
18.0	16.9	12.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	58.	29.	47.	52.	58.	59.	51.	41.	27.	8.	-14.	SNR	
22.0	18.6	14.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	-1.	-3.	34.	44.	50.	-5.	56.	26.	-38.	****	****	SNR	

TX LOCATION = -17.30, 123.63

RX LOCATION = 17.22, 100.62

2.0	24.9	19.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	9.	****	-45.	1.	23.	35.	41.	-15.	52.	35.	1.	SNR	
6.0	26.5	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	19.	****	-93.	-15.	9.	25.	35.	23.	53.	47.	42.	SNR	
10.0	29.0	23.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	31.	-20.	26.	38.	41.	44.	47.	49.	30.	13.	51.	SNR	
14.0	20.0	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	49.	21.	40.	45.	48.	50.	50.	35.	7.	-39.	-98.	SNR	
18.0	13.7	10.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	50.	19.	40.	48.	51.	25.	-34.	****	****	****	****	SNR	
22.0	12.3	9.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
34.	42.	-2.	28.	41.	43.	17.	-17.	-67.	****	****	****	SNR	

TX LOCATION = -17.30, 123.63

RX LOCATION = -12.20, 96.90

2.0	22.0	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	56.	****	-30.	30.	45.	39.	58.	59.	45.	17.	-24.	SNR	
6.0	31.5	24.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	59.	****	-83.	5.	32.	43.	53.	54.	58.	61.	62.	SNR	
10.0	29.6	23.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	64.	8.	41.	49.	56.	60.	63.	63.	64.	64.	57.	SNR	
14.0	27.1	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	65.	36.	50.	58.	62.	64.	65.	65.	64.	58.	50.	SNR	
18.0	20.0	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	64.	39.	52.	60.	63.	63.	63.	54.	37.	11.	-22.	SNR	
22.0	16.6	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	59.	24.	45.	54.	58.	61.	52.	41.	25.	4.	-21.	SNR	

TX LOCATION = -2.47, 140.63

RX LOCATION = -34.87, 138.50

2.0	29.4	23.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	54.	****	-96.	-20.	15.	34.	42.	51.	55.	57.	50.	SNR	
6.0	33.4	27.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	61.	****	-24.	15.	33.	42.	48.	58.	38.	61.	61.	SNR	
10.0	26.0	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	51.	29.	32.	43.	48.	52.	51.	61.	60.	53.	41.	SNR	
14.0	27.7	20.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	40.	27.	36.	47.	54.	57.	56.	36.	62.	59.	48.	SNR	
18.0	19.4	14.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	61.	30.	41.	50.	54.	61.	59.	51.	42.	31.	16.	SNR	
22.0	23.6	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

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52. 8. -51. 16. 37. 44. 50. 18. 59. 50. 23. -27. SNR
TX LOCATION = -2.47, 140.63
RX LOCATION = -12.33, 130.83
2.0 18.5 16.1 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
46. 65. -98. -4. 41. 57. 63. 61. 32. 3. -88. **** SNR
6.0 21.2 17.4 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
68. 63. -25. 28. 50. 60. 60. 64. 67. 59. 51. 40. SNR
10.0 17.6 12.1 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
62. 59. 37. 50. 57. 59. 61. 57. 48. 30. 6. -19. SNR
14.0 16.7 12.3 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
66. 61. 35. 50. 56. 61. 65. 58. 43. 17. -12. -38. SNR
18.0 12.1 9.1 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
62. 57. 41. 53. 57. 62. 54. 43. 25. 4. -18. -36. SNR
22.0 14.7 11.8 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
67. 65. 26. 54. 62. 65. 61. 27. -29. -40. -39. -39. SNR
TX LOCATION = -2.47, 140.63
RX LOCATION = -23.67, 135.83
2.0 24.9 20.6 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
62. 59. **** -78. 15. 33. 43. 54. 59. 62. 53. 47. SNR
6.0 29.5 24.2 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
65. 64. **** -9. 31. 42. 53. 59. 61. 64. 66. 58. SNR
10.0 22.9 15.8 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
64. 60. 30. 42. 50. 55. 59. 62. 64. 57. 45. 26. SNR
14.0 24.0 17.8 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
60. 65. 28. 42. 52. 60. 63. 65. 66. 60. 50. 33. SNR
18.0 16.9 12.7 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
63. 62. 32. 46. 56. 61. 64. 56. 49. 37. 22. 3. SNR
22.0 19.9 15.9 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
63. 61. -24. 31. 45. 56. 60. 63. 51. 15. -40. -80. SNR
TX LOCATION = -2.47, 140.63
RX LOCATION = -19.33, 146.83
2.0 22.9 19.0 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
66. 62. **** -21. 28. 44. 56. 60. 64. 58. 53. 46. SNR
6.0 25.8 21.1 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
68. 65. -64. 31. 48. 55. 59. 61. 65. 68. 60. 54. SNR
10.0 19.9 13.7 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
65. 60. 40. 49. 57. 59. 62. 64. 59. 47. 26. 0. SNR
14.0 20.5 15.1 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
67. 66. 33. 48. 57. 62. 65. 67. 61. 49. 28. 1. SNR
18.0 14.4 10.8 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
64. 61. 46. 54. 58. 63. 59. 52. 39. 22. 1. -21. SNR
22.0 18.2 14.5 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
67. 64. 8. 45. 59. 62. 64. 67. 42. 24. -12. -58. SNR
TX LOCATION = -2.47, 140.63
RX LOCATION = -17.30, 123.63
2.0 23.8 19.8 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
61. 58. **** -73. 20. 38. 51. 55. 60. 61. 51. 44. SNR
6.0 30.0 24.6 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
64. 64. **** -17. 29. 43. 53. 58. 61. 63. 65. 64. SNR
10.0 24.5 16.9 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
63. 59. 27. 43. 51. 55. 58. 60. 63. 63. 52. 39. SNR
14.0 24.1 17.9 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
59. 65. 28. 44. 53. 59. 63. 65. 65. 63. 50. 34. SNR
18.0 17.2 12.9 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ

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	62.	62.	32.	46.	55.	60.	63.	57.	49.	39.	24.	6.	SNR
22.0	19.3	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	62.	61.	-6.	36.	50.	57.	61.	63.	44.	-1.	-59.	-84.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = 13.45, 144.75													
2.0	19.8	17.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	54.	59.	****	-9.	35.	50.	61.	59.	57.	61.	63.	63.	SNR
6.0	17.7	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	61.	-2.	44.	58.	59.	60.	60.	59.	62.	60.	54.	SNR
10.0	16.3	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	56.	44.	54.	57.	55.	57.	47.	33.	8.	-22.	-42.	SNR
14.0	13.8	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	59.	56.	40.	54.	55.	58.	52.	40.	17.	-12.	-42.	-55.	SNR
18.0	10.5	7.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	59.	55.	43.	53.	57.	52.	40.	18.	-11.	-42.	-62.	-62.	SNR
22.0	18.4	16.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	73.	70.	20.	52.	62.	63.	67.	73.	60.	50.	27.	-35.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = 14.67, 121.05													
2.0	20.5	17.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	60.	54.	****	-49.	20.	33.	46.	55.	55.	42.	37.	18.	SNR
6.0	21.9	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	63.	54.	****	2.	37.	43.	44.	51.	61.	49.	24.	-13.	SNR
10.0	22.0	17.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	51.	53.	29.	45.	51.	51.	50.	53.	56.	48.	35.	12.	SNR
14.0	18.5	13.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	52.	54.	32.	49.	52.	54.	55.	56.	46.	32.	10.	-17.	SNR
18.0	15.2	10.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	55.	58.	34.	50.	56.	60.	58.	47.	33.	14.	-9.	-36.	SNR
22.0	20.1	17.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	55.	61.	-8.	30.	44.	53.	56.	62.	51.	31.	-2.	-44.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = 17.22, 100.62													
2.0	25.8	22.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	44.	-5.	****	****	-8.	19.	28.	39.	13.	39.	40.	23.	SNR
6.0	19.5	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	43.	36.	****	****	-2.	22.	33.	40.	22.	-28.	-15.	****	SNR
10.0	20.9	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	45.	48.	2.	33.	44.	47.	48.	49.	39.	20.	29.	-67.	SNR
14.0	17.9	12.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	39.	49.	20.	42.	48.	49.	49.	38.	20.	-12.	-58.	****	SNR
18.0	14.5	10.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	39.	51.	20.	41.	49.	51.	37.	17.	-13.	-54.	****	****	SNR
22.0	12.2	10.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	41.	-22.	17.	36.	42.	-22.	****	****	****	****	****	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = -12.20, 96.90													
2.0	21.0	17.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	46.	42.	****	****	-5.	25.	38.	44.	46.	27.	46.	-15.	SNR
6.0	28.5	23.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	50.	49.	****	****	-18.	16.	34.	43.	48.	50.	52.	36.	SNR
10.0	25.8	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	51.	56.	-8.	32.	45.	51.	55.	56.	56.	54.	38.	17.	SNR
14.0	23.7	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

44.	59.	27.	47.	53.	57.	60.	59.	57.	43.	21.	-14.	SNR	
18.0	16.5	12.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	57.	32.	47.	55.	57.	54.	37.	19.	-6.	-40.	-79.	SNR	
22.0	15.4	12.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	49.	-17.	26.	44.	49.	49.	-23.	****	****	****	****	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -34.87, 138.50													
2.0	23.5	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	26.	****	****	-53.	-9.	14.	27.	29.	27.	-1.	36.	SNR	
6.0	30.2	24.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	52.	****	-55.	0.	21.	34.	45.	50.	52.	53.	49.	SNR	
10.0	23.3	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	51.	19.	25.	38.	45.	50.	52.	51.	37.	12.	-26.	SNR	
14.0	20.3	14.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	55.	12.	37.	48.	54.	55.	53.	37.	17.	-14.	-55.	SNR	
13.0	14.8	10.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	50.	16.	38.	48.	50.	38.	20.	-7.	-44.	-91.	****	SNR	
22.0	21.2	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	48.	-95.	-8.	24.	33.	42.	49.	45.	-12.	****	****	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -12.33, 130.83													
2.0	21.5	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	45.	****	-97.	-1.	19.	24.	42.	49.	36.	11.	-25.	SNR	
6.0	25.2	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	55.	****	-6.	26.	39.	45.	46.	53.	58.	46.	25.	SNR	
10.0	23.7	18.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	56.	16.	37.	47.	53.	55.	55.	58.	52.	43.	27.	SNR	
14.0	20.0	14.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	56.	21.	40.	50.	55.	57.	58.	52.	41.	24.	1.	SNR	
18.0	15.3	10.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	52.	26.	43.	50.	55.	56.	46.	33.	14.	-9.	-35.	SNR	
22.0	23.2	20.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	62.	-24.	28.	47.	55.	60.	60.	62.	51.	34.	7.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -23.67, 135.83													
2.0	28.3	24.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	46.	****	****	-30.	7.	26.	33.	24.	-15.	49.	39.	SNR	
6.0	32.5	28.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	-17.	****	-21.	15.	30.	40.	47.	50.	37.	4.	58.	SNR	
10.0	27.0	21.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	35.	21.	36.	45.	51.	53.	55.	37.	11.	56.	44.	SNR	
14.0	23.4	16.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	53.	20.	41.	49.	54.	55.	42.	22.	52.	42.	29.	SNR	
18.0	13.1	9.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	49.	27.	42.	49.	51.	33.	9.	-26.	-72.	****	****	SNR	
22.0	25.0	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	19.	-75.	15.	39.	47.	51.	52.	-3.	55.	37.	0.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -19.33, 146.83													
2.0	26.2	22.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	48.	****	****	-13.	18.	28.	27.	44.	50.	45.	31.	SNR	
6.0	29.8	25.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	59.	-90.	-2.	26.	41.	48.	51.	53.	58.	60.	53.	SNR	
10.0	25.3	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

55.	60.	22.	39.	49.	52.	57.	58.	61.	60.	50.	37.	SNR	
14.0	21.5	15.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	51.	23.	42.	49.	53.	52.	60.	57.	47.	34.	15.	SNR	
18.0	15.6	10.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	47.	29.	43.	47.	37.	55.	45.	33.	15.	-8.	-35.	SNR	
22.0	24.9	21.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	58.	-63.	10.	35.	46.	49.	38.	58.	58.	44.	26.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -17.30, 123.63													
2.0	25.1	21.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
43.	44.	****	****	-13.	15.	27.	29.	-1.	47.	37.	17.	SNR	
6.0	29.7	25.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	-23.	****	-32.	10.	31.	40.	43.	51.	10.	56.	49.	SNR	
10.0	26.9	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	34.	17.	37.	47.	51.	52.	53.	35.	59.	53.	44.	SNR	
14.0	22.6	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	53.	23.	41.	50.	53.	54.	38.	14.	49.	38.	23.	SNR	
18.0	16.9	11.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	50.	25.	42.	48.	49.	30.	49.	40.	26.	7.	-15.	SNR	
22.0	23.4	18.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	19.	-46.	25.	43.	51.	54.	31.	-48.	47.	16.	-37.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -2.47, 140.63													
2.0	19.8	17.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	61.	****	-9.	35.	52.	64.	61.	58.	61.	63.	63.	SNR	
6.0	17.7	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
71.	65.	2.	45.	59.	62.	64.	65.	62.	63.	60.	54.	SNR	
10.0	16.3	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	59.	39.	51.	56.	58.	61.	52.	35.	8.	-22.	-42.	SNR	
14.0	13.8	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	55.	35.	49.	53.	59.	54.	41.	17.	-12.	-42.	-55.	SNR	
18.0	10.5	7.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	53.	42.	51.	56.	52.	40.	18.	-12.	-42.	-62.	-62.	SNR	
22.0	18.4	16.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
73.	71.	22.	51.	63.	65.	68.	73.	60.	50.	27.	-35.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = 14.67, 121.05													
2.0	24.8	21.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	60.	****	-29.	28.	42.	51.	54.	60.	63.	48.	28.	SNR	
6.0	28.6	24.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	-94.	14.	39.	47.	51.	55.	58.	63.	65.	53.	SNR	
10.0	24.6	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	56.	34.	48.	53.	54.	54.	55.	58.	61.	50.	35.	SNR	
14.0	20.1	14.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	56.	30.	48.	54.	55.	57.	60.	54.	45.	29.	7.	SNR	
18.0	13.9	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	58.	36.	51.	57.	60.	53.	41.	24.	0.	-27.	-56.	SNR	
22.0	18.3	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	63.	7.	40.	51.	57.	61.	63.	41.	10.	-32.	-75.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = 17.22, 100.62													
2.0	26.1	22.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	50.	****	****	-8.	21.	37.	45.	48.	52.	34.	5.	SNR	
6.0	28.8	25.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

54.	53.	****	-57.	1.	22.	33.	42.	49.	52.	55.	33.	SNR	
10.0	25.9	20.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	53.	9.	34.	44.	47.	50.	52.	54.	56.	37.	14.	SNR	
14.0	21.1	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	52.	15.	38.	47.	50.	52.	53.	48.	26.	0.	-36.	SNR	
18.0	14.8	10.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	52.	17.	43.	50.	52.	39.	21.	-7.	-46.	-94.	****	SNR	
22.0	11.6	10.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	45.	-3.	30.	42.	29.	-37.	****	****	****	****	****	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -12.20, 96.90													
2.0	21.9	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	37.	****	****	-20.	14.	27.	34.	42.	14.	-35.	****	SNR	
6.0	22.2	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	32.	****	****	-28.	4.	20.	26.	38.	15.	26.	****	SNR	
10.0	22.9	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	52.	-15.	21.	38.	46.	50.	52.	52.	34.	8.	-33.	SNR	
14.0	19.4	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	52.	18.	38.	47.	51.	51.	48.	29.	4.	-34.	-84.	SNR	
18.0	15.7	11.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	51.	16.	40.	49.	50.	45.	24.	0.	-35.	-79.	****	SNR	
22.0	15.3	13.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
33.	48.	-24.	18.	38.	47.	44.	-10.	****	****	****	****	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -34.87, 138.50													
2.0	21.5	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
35.	25.	****	****	-39.	-1.	18.	22.	34.	6.	35.	****	SNR	
6.0	26.2	22.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
43.	39.	****	****	-33.	4.	22.	31.	34.	42.	29.	-2.	SNR	
10.0	25.4	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	51.	5.	24.	34.	43.	49.	52.	52.	48.	30.	4.	SNR	
14.0	22.0	15.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	55.	10.	38.	47.	53.	55.	54.	49.	30.	8.	-23.	SNR	
18.0	15.9	11.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	51.	22.	41.	49.	52.	47.	28.	7.	-24.	-63.	****	SNR	
22.0	18.7	16.5	3.0	6.0	9.0	12.0	15.0	19.0	21.0	24.0	27.0	30.0	FREQ
34.	48.	-65.	3.	25.	40.	46.	49.	9.	-50.	****	****	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -12.33, 130.83													
2.0	21.1	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	46.	****	-71.	10.	27.	29.	46.	52.	35.	7.	-31.	SNR	
6.0	23.9	20.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	51.	****	-44.	17.	35.	42.	44.	52.	51.	36.	9.	SNR	
10.0	24.9	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	56.	9.	31.	44.	50.	54.	54.	57.	58.	49.	36.	SNR	
14.0	21.4	15.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	58.	22.	41.	50.	55.	58.	60.	59.	48.	36.	18.	SNR	
18.0	16.1	11.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	54.	28.	45.	51.	55.	57.	49.	38.	23.	3.	-21.	SNR	
22.0	19.3	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	60.	4.	37.	49.	56.	58.	61.	44.	18.	-23.	-70.	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -23.67, 135.83													
2.0	25.9	22.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

41.	-14.	****	-92.	-20.	13.	25.	35.	7.	46.	38.	22.	SNR	
6.0	31.1	27.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	-15.	****	-53.	-8.	19.	33.	34.	45.	26.	-15.	53.	SNR	
10.0	29.0	22.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	38.	5.	30.	39.	46.	51.	53.	54.	31.	2.	50.	SNR	
14.0	19.2	13.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	55.	21.	39.	48.	54.	56.	53.	35.	12.	-22.	-66.	SNR	
18.0	14.0	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	51.	28.	43.	49.	52.	37.	18.	-11.	-51.	-98.	****	SNR	
22.0	16.7	14.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	51.	-40.	20.	37.	47.	51.	26.	37.	****	****	****	SNR	

TX LOCATION = 14.67, 121.05

RX LOCATION = -19.33, 146.83

2.0	25.0	21.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	-12.	****	****	-22.	11.	17.	34.	-4.	43.	32.	12.	SNR	
6.0	28.7	25.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	-11.	****	-88.	1.	26.	34.	37.	46.	6.	53.	42.	SNR	
10.0	20.9	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	51.	2.	27.	40.	49.	51.	53.	43.	22.	53.	-63.	SNR	
14.0	17.9	12.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	53.	15.	37.	47.	52.	54.	43.	24.	-8.	-51.	****	SNR	
18.0	13.8	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	49.	25.	42.	48.	50.	35.	14.	-18.	-62.	****	****	SNR	
22.0	18.4	16.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	52.	-64.	11.	35.	46.	49.	53.	12.	-45.	****	****	SNR	

TX LOCATION = 14.67, 121.05

RX LOCATION = -17.30, 123.63

2.0	23.1	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	48.	****	-66.	8.	31.	40.	44.	50.	44.	27.	-3.	SNR	
6.0	27.6	24.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	54.	****	-59.	7.	30.	35.	47.	48.	54.	57.	42.	SNR	
10.0	27.8	21.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	60.	12.	35.	44.	51.	54.	57.	59.	61.	60.	49.	SNR	
14.0	24.0	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	61.	30.	44.	52.	56.	57.	61.	61.	55.	44.	25.	SNR	
18.0	16.9	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	57.	32.	45.	49.	56.	58.	51.	42.	28.	10.	-11.	SNR	
22.0	18.6	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	59.	6.	36.	46.	52.	17.	57.	37.	4.	-43.	-92.	SNR	

TX LOCATION = 14.67, 121.05

RX LOCATION = -2.47, 140.63

2.0	20.5	17.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	55.	****	-44.	25.	40.	48.	56.	58.	43.	37.	18.	SNR	
6.0	21.9	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	55.	****	-3.	32.	40.	46.	52.	61.	49.	24.	-13.	SNR	
10.0	22.0	17.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	57.	19.	37.	48.	53.	54.	58.	60.	50.	35.	12.	SNR	
14.0	18.5	13.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	56.	23.	42.	51.	55.	59.	59.	47.	32.	10.	-17.	SNR	
18.0	15.2	10.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	54.	31.	47.	52.	56.	57.	46.	33.	14.	-9.	-36.	SNR	
22.0	20.1	17.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	3.	38.	52.	58.	59.	63.	51.	31.	-2.	-44.	SNR	

TX LOCATION = 14.67, 121.05



RX LOCATION = 13.45, 144.75

2.0	24.8	21.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	60.	****	-29.	28.	41.	50.	54.	59.	63.	48.	28.	28.	SNR
6.0	28.6	24.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	-95.	12.	37.	45.	49.	54.	57.	63.	65.	53.	53.	SNR
10.0	24.6	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	58.	30.	46.	52.	53.	54.	56.	60.	62.	50.	35.	35.	SNR
14.0	20.1	14.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	58.	27.	48.	55.	56.	59.	62.	55.	45.	29.	7.	7.	SNR
18.0	13.9	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	55.	35.	50.	54.	58.	52.	41.	24.	0.	-27.	-56.	-56.	SNR
22.0	18.3	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	62.	15.	47.	56.	58.	61.	63.	41.	10.	-32.	-75.	-75.	SNR

TX LOCATION = 14.67, 121.05

RX LOCATION = 17.22, 100.62

2.0	26.3	22.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	-88.	25.	39.	54.	58.	61.	64.	66.	58.	48.	48.	SNR
6.0	25.1	18.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	56.	****	5.	31.	38.	52.	55.	61.	64.	55.	44.	44.	SNR
10.0	27.0	20.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	62.	28.	53.	54.	55.	56.	59.	63.	66.	66.	54.	54.	SNR
14.0	22.4	17.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	40.	50.	55.	58.	61.	64.	66.	57.	50.	40.	40.	SNR
18.0	15.4	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	63.	38.	52.	59.	63.	64.	51.	37.	18.	-7.	-33.	-33.	SNR
22.0	9.1	6.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	50.	38.	50.	55.	41.	16.	-21.	-58.	-73.	-73.	-72.	-72.	SNR

TX LOCATION = 14.67, 121.05

RX LOCATION = -12.20, 96.90

2.0	23.9	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	56.	****	-34.	18.	38.	46.	51.	55.	50.	38.	17.	17.	SNR
6.0	26.2	22.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	48.	****	-95.	-13.	17.	28.	40.	44.	50.	45.	30.	30.	SNR
10.0	28.8	25.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	61.	0.	32.	39.	48.	52.	55.	40.	61.	61.	50.	50.	SNR
14.0	25.9	20.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	34.	34.	48.	53.	56.	58.	56.	29.	60.	51.	38.	38.	SNR
18.0	17.2	12.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	51.	34.	48.	53.	51.	22.	49.	35.	12.	-19.	-54.	-54.	SNR
22.0	14.9	10.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	46.	24.	39.	46.	33.	50.	40.	25.	2.	-25.	-55.	-55.	SNR

TX LOCATION = 17.22, 100.62

RX LOCATION = -34.87, 138.50

2.0	25.0	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
29.	40.	****	****	-55.	-5.	19.	29.	40.	41.	22.	6.	6.	SNR
6.0	23.9	20.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
24.	24.	****	****	-68.	-21.	5.	22.	26.	24.	-3.	-52.	-52.	SNR
10.0	27.2	18.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	43.	-34.	6.	22.	33.	40.	43.	51.	48.	40.	18.	18.	SNR
14.0	24.5	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	55.	3.	30.	40.	46.	55.	56.	54.	44.	19.	-14.	-14.	SNR
18.0	16.5	11.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
35.	42.	7.	32.	41.	50.	46.	24.	-10.	-63.	****	****	****	SNR
22.0	14.8	10.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

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      28. 29. -66. 5. 26. 25. 27. 8. -23. -67. **** ** SNR
TX LOCATION = 17.22, 100.62
RX LOCATION = -12.33, 130.83
  2.0 24.7 21.7 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    48. -9. **** -52. -6. 18. 32. 35. 2. 51. 39. 22. SNR
  6.0 25.2 21.7 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    44. -17. **** -78. -18. 7. 22. 35. -6. 49. 38. 18. SNR
 10.0 28.0 24.3 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    52. -1. -28. 15. 25. 35. 42. 46. 46. 4. 55. 43. SNR
 14.0 19.2 15.2 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    39. 51. 4. 28. 39. 47. 51. 52. 27. -9. -64. **** SNR
 18.0 14.0 10.0 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    36. 44. 9. 32. 42. 47. 30. -3. -58. **** ** SNR
 22.0 12.8 9.0 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    41. 42. 3. 29. 42. 44. 22. -6. -49. **** ** SNR
TX LOCATION = 17.22, 100.62
RX LOCATION = -23.67, 135.83
  2.0 21.1 18.6 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    39. 31. **** ** -27. 4. 21. 28. 39. 8. -35. -95. SNR
  6.0 21.1 18.1 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    36. 25. **** ** -40. -2. 18. 24. 36. 1. -52. **** SNR
 10.0 24.4 21.3 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    38. 51. -23. 18. 22. 34. 42. 48. 51. 50. 14. -37. SNR
 14.0 22.3 17.6 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    39. 55. 3. 30. 42. 49. 54. 55. 51. 28. -4. -52. SNR
 18.0 15.6 11.1 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    36. 49. 10. 34. 44. 49. 44. 17. -24. -85. **** ** SNR
 22.0 14.3 10.0 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    31. 40. -24. 19. 38. 42. 28. 6. -28. -75. **** ** SNR
TX LOCATION = 17.22, 100.62
RX LOCATION = -19.33, 146.83
  2.0 23.0 20.2 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    39. 36. **** ** -34. -4. 18. 31. 38. 24. 30. -50. SNR
  6.0 21.7 18.6 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    38. 29. **** ** -40. 3. 18. 27. 37. 9. -41. **** SNR
 10.0 24.8 21.6 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    38. 52. -35. 17. 23. 35. 43. 49. 51. 51. 18. -31. SNR
 14.0 21.9 17.3 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    38. 54. -3. 24. 39. 47. 52. 53. 48. 22. -15. -70. SNR
 18.0 16.4 11.7 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    35. 47. 6. 29. 42. 47. 45. 23. -13. -68. **** ** SNR
 22.0 14.8 10.4 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    29. 38. -60. 11. 34. 40. 28. 10. -21. -64. **** ** SNR
TX LOCATION = 17.22, 100.62
RX LOCATION = -17.30, 123.63
  2.0 24.9 21.9 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    47. -5. **** -45. -3. 17. 28. 41. 7. 50. 38. 22. SNR
  6.0 26.5 22.8 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    43. -18. **** -93. -25. 3. 17. 34. 8. 47. 42. 29. SNR
 10.0 29.0 25.3 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    53. -3. -28. 18. 28. 34. 43. 46. 50. 16. -37. 48. SNR
 14.0 20.0 15.8 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ
    47. 54. 11. 33. 42. 50. 54. 55. 35. 7. -39. -98. SNR
 18.0 13.7 9.7 3.0 6.0 9.0 12.0 15.0 18.0 21.0 24.0 27.0 30.0 FREQ

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44.	46.	15.	35.	45.	49.	29.	-7.	-65.	****	****	****	SNR	
22.0	12.3	8.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
35.	41.	16.	30.	42.	42.	18.	-14.	-62.	****	****	****	SNR	
TX LOCATION = 17.22, 100.62													
RX LOCATION = -2.47, 140.63													
2.0	25.8	22.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	-6.	****	****	-11.	17.	25.	36.	11.	37.	38.	21.	SNR	
6.0	19.5	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	31.	****	****	-11.	18.	30.	36.	20.	-25.	-15.	****	SNR	
10.0	20.9	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	47.	-15.	14.	33.	43.	47.	49.	40.	20.	28.	-67.	SNR	
14.0	17.9	12.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	50.	6.	33.	43.	49.	51.	40.	21.	-12.	-58.	****	SNR	
18.0	14.5	10.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	46.	10.	35.	44.	48.	35.	4.	-50.	****	****	****	SNR	
22.0	12.2	8.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	42.	-3.	32.	43.	41.	17.	-17.	-66.	****	****	****	SNR	
TX LOCATION = 17.22, 100.62													
RX LOCATION = 13.45, 144.75													
2.0	26.1	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	46.	****	****	-6.	21.	35.	43.	47.	50.	36.	17.	SNR	
6.0	28.8	22.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	48.	****	-58.	-1.	20.	30.	38.	46.	51.	52.	37.	SNR	
10.0	25.9	20.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	52.	-2.	28.	39.	44.	47.	50.	53.	55.	39.	27.	SNR	
14.0	21.1	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	55.	7.	36.	46.	51.	54.	56.	50.	30.	12.	-12.	SNR	
18.0	14.8	9.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	49.	15.	40.	47.	50.	38.	20.	-9.	-50.	-99.	****	SNR	
22.0	11.6	7.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	41.	7.	36.	42.	32.	9.	-31.	-87.	****	****	****	SNR	
TX LOCATION = 17.22, 100.62													
RX LOCATION = 14.67, 121.05													
2.0	26.3	22.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	-88.	26.	40.	54.	57.	60.	64.	66.	58.	48.	SNR	
6.0	25.1	18.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	54.	****	5.	31.	37.	51.	53.	59.	64.	54.	44.	SNR	
10.0	27.0	20.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	59.	21.	48.	49.	51.	53.	56.	60.	64.	65.	54.	SNR	
14.0	22.4	17.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	63.	35.	47.	53.	56.	59.	63.	66.	57.	50.	40.	SNR	
18.0	15.4	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	64.	36.	50.	59.	64.	64.	51.	37.	18.	-7.	-33.	SNR	
22.0	9.1	6.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	50.	37.	49.	53.	39.	14.	-21.	-58.	-73.	-73.	-72.	SNR	
TX LOCATION = 17.22, 100.62													
RX LOCATION = -12.20, 96.90													
2.0	22.8	20.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	54.	-94.	-3.	27.	39.	49.	51.	56.	48.	33.	8.	SNR	
6.0	22.8	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	46.	****	****	-14.	16.	33.	41.	49.	44.	26.	-4.	SNR	
10.0	26.4	23.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	61.	-15.	29.	38.	45.	51.	54.	59.	61.	53.	37.	SNR	
14.0	24.8	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

56.	64.	34.	49.	55.	59.	63.	63.	64.	61.	49.	35.	SNR	
18.0	18.1	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	61.	37.	49.	57.	61.	61.	58.	44.	26.	1.	-29.	SNR	
22.0	13.8	9.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	55.	34.	47.	54.	56.	49.	36.	17.	-10.	-40.	-72.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -34.87, 138.50													
2.0	19.4	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
18.	40.	****	-98.	-7.	21.	37.	39.	-27.	-49.	****	****	SNR	
6.0	20.8	16.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	34.	****	****	-25.	10.	30.	38.	32.	15.	49.	-53.	SNR	
10.0	20.7	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	49.	-28.	15.	29.	41.	48.	52.	38.	16.	-21.	-72.	SNR	
14.0	19.0	13.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	54.	13.	31.	44.	51.	54.	51.	28.	-5.	-54.	****	SNR	
18.0	14.4	11.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	52.	19.	38.	48.	52.	35.	-10.	-89.	****	****	****	SNR	
22.0	14.5	11.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
36.	45.	-30.	22.	40.	46.	34.	42.	-19.	-65.	****	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -12.33, 130.83													
2.0	25.5	20.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	55.	****	-51.	18.	38.	44.	51.	55.	57.	44.	15.	SNR	
6.0	36.6	30.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	60.	****	-91.	-14.	19.	35.	43.	52.	53.	38.	59.	SNR	
10.0	33.1	27.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	30.	-19.	21.	36.	46.	51.	53.	55.	42.	31.	62.	SNR	
14.0	30.5	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	55.	14.	35.	46.	54.	57.	58.	55.	62.	61.	58.	SNR	
18.0	21.7	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	60.	18.	40.	49.	54.	60.	61.	58.	46.	26.	-2.	SNR	
22.0	18.7	14.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	40.	15.	40.	49.	52.	35.	56.	47.	38.	24.	6.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -23.67, 135.83													
2.0	25.2	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	51.	****	-55.	4.	26.	40.	43.	7.	53.	40.	15.	SNR	
6.0	33.5	26.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	30.	****	-85.	-18.	14.	32.	40.	45.	48.	27.	7.	SNR	
10.0	22.9	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	54.	-25.	25.	34.	45.	50.	54.	56.	39.	18.	56.	SNR	
14.0	21.6	15.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	58.	15.	34.	48.	55.	58.	58.	54.	32.	6.	-32.	SNR	
18.0	20.9	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	42.	20.	40.	50.	55.	54.	23.	52.	38.	13.	-20.	SNR	
22.0	14.4	11.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	49.	-9.	34.	45.	50.	38.	19.	-13.	-57.	****	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -19.33, 146.83													
2.0	21.4	17.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	35.	****	****	-24.	11.	30.	37.	40.	-4.	44.	****	SNR	
6.0	29.5	23.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
43.	44.	****	****	-49.	-1.	16.	32.	40.	45.	48.	34.	SNR	
10.0	25.1	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

46.	50.	-30.	1.	23.	37.	45.	50.	52.	50.	31.	43.	SNR	
14.0	25.3	19.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
41.	57.	-1.	20.	36.	47.	54.	56.	56.	52.	31.	4.	SNR	
18.0	18.1	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	54.	12.	30.	44.	51.	54.	47.	26.	4.	-26.	-63.	SNR	
22.0	16.6	12.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	45.	-41.	15.	36.	44.	46.	30.	12.	-15.	-51.	-94.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -17.30, 123.63													
2.0	22.0	17.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	57.	****	-30.	31.	45.	38.	57.	59.	42.	6.	-44.	SNR	
6.0	31.5	24.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	59.	****	-84.	4.	31.	42.	51.	54.	58.	61.	62.	SNR	
10.0	29.6	23.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	63.	-7.	32.	43.	51.	56.	59.	61.	64.	64.	57.	SNR	
14.0	27.1	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	64.	23.	41.	52.	59.	62.	64.	64.	64.	58.	50.	SNR	
18.0	20.0	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	62.	29.	45.	54.	60.	62.	62.	54.	37.	11.	-22.	SNR	
22.0	16.6	12.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	59.	28.	47.	55.	58.	60.	52.	43.	29.	11.	-11.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -2.47, 140.63													
2.0	21.0	16.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	40.	****	****	-4.	24.	37.	43.	45.	-4.	39.	****	SNR	
6.0	28.5	23.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	48.	****	****	-21.	12.	30.	40.	47.	49.	52.	36.	SNR	
10.0	25.8	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	51.	-34.	15.	33.	43.	48.	51.	52.	52.	38.	17.	SNR	
14.0	23.7	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	57.	5.	32.	44.	52.	56.	57.	56.	43.	21.	-14.	SNR	
18.0	16.5	12.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	53.	15.	38.	48.	52.	53.	36.	19.	-6.	-40.	-79.	SNR	
22.0	15.4	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	48.	-13.	29.	44.	48.	47.	27.	4.	-29.	-71.	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = 13.45, 144.75													
2.0	21.9	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	35.	****	****	-18.	14.	25.	36.	41.	8.	-63.	****	SNR	
6.0	22.2	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	30.	****	-98.	-25.	3.	16.	25.	37.	15.	27.	****	SNR	
10.0	22.9	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	44.	-33.	13.	30.	38.	41.	44.	46.	32.	7.	-33.	SNR	
14.0	19.4	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	48.	4.	34.	43.	47.	48.	47.	29.	4.	-34.	-84.	SNR	
18.0	15.7	11.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
36.	48.	12.	37.	46.	48.	44.	24.	0.	-35.	-79.	****	SNR	
22.0	15.3	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
32.	42.	-22.	22.	38.	42.	38.	18.	-9.	-48.	-96.	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = 14.67, 121.05													
2.0	23.9	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	53.	****	-33.	18.	37.	43.	51.	55.	50.	28.	-14.	SNR	
6.0	26.2	22.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

49.	51.	****	-95.	-6.	20.	28.	38.	47.	54.	47.	32.	SNR	
10.0	28.8	25.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	60.	-14.	25.	36.	42.	45.	47.	33.	59.	61.	50.	SNR	
14.0	25.9	20.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	32.	23.	41.	46.	49.	51.	52.	28.	59.	51.	38.	SNR	
18.0	17.2	12.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	46.	17.	40.	49.	51.	11.	48.	25.	-13.	-59.	****	SNR	
22.0	14.9	11.2	3.0	6.0	9.0	12.0	15.0	13.0	21.0	24.0	27.0	30.0	FREQ
50.	39.	17.	35.	42.	29.	48.	39.	23.	0.	-28.	-59.	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = 17.22, 100.62													
2.0	22.8	20.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	59.	-94.	2.	31.	42.	51.	56.	60.	49.	34.	8.	SNR	
6.0	22.8	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	48.	****	****	-6.	22.	33.	43.	52.	46.	28.	-2.	SNR	
10.0	26.4	23.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	60.	-22.	27.	38.	46.	50.	52.	57.	62.	54.	38.	SNR	
14.0	24.8	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	62.	27.	45.	51.	54.	58.	60.	63.	61.	49.	35.	SNR	
18.0	18.1	13.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	60.	30.	44.	55.	59.	61.	58.	39.	9.	-31.	-73.	SNR	
22.0	13.8	9.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	53.	28.	45.	52.	55.	48.	36.	17.	-10.	-40.	-72.	SNR	

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 12  
 Sunspot Number = 50.00

Time-of-day (UT) = 2  
 Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-999.0	-50.0	-76.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Darwin	-999.0	500.0	-73.0	-97.0	-48.0	-98.0	-999.0	-999.0	-999.0	-999.0
ASprin	-50.0	-73.0	500.0	-70.0	-64.0	-999.0	-999.0	-999.0	-999.0	-999.0
TownsV	-76.0	-98.0	-71.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Derby	-999.0	-48.0	-64.0	-999.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0
Jayapu	-999.0	-98.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0	-999.0	-999.0
Guam	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-88.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-88.0	500.0	-94.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-94.0	500.0

Time-of-day (UT) = 2  
 Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-60.0	22.0	2.0	-44.0	-97.0	-999.0	-999.0	-999.0	-99.0
Darwin	-59.0	500.0	9.0	-10.0	28.0	-4.0	-96.0	-70.0	-51.0	-51.0
ASprin	22.0	9.0	500.0	11.0	13.0	-78.0	-999.0	-94.0	-89.0	-56.0
TownsV	2.0	-10.0	12.0	500.0	-65.0	-20.0	-999.0	-999.0	-999.0	-999.0
Derby	-44.0	27.0	13.0	-66.0	500.0	-74.0	-999.0	-66.0	-45.0	-30.0
Jayapu	-96.0	-4.0	-78.0	-21.0	-73.0	500.0	-9.0	-49.0	-999.0	-999.0
Guam	-999.0	-97.0	-999.0	-999.0	-999.0	-9.0	500.0	-29.0	-999.0	-999.0
Manila	-999.0	-71.0	-92.0	-999.0	-66.0	-44.0	-29.0	500.0	25.0	-34.0
Songkh	-999.0	-52.0	-999.0	-999.0	-45.0	-999.0	-999.0	26.0	500.0	-3.0
Cocos	-98.0	-51.0	-55.0	-999.0	-30.0	-999.0	-999.0	-33.0	2.0	500.0

Time-of-day (UT) = 2  
 Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	5.0	49.0	35.0	23.0	-20.0	-40.0	-28.0	-57.0	-7.0
Darwin	6.0	500.0	43.0	28.0	62.0	41.0	10.0	19.0	-6.0	17.0
ASprin	49.0	42.0	500.0	43.0	44.0	15.0	-19.0	-10.0	-16.0	3.0
TownsV	36.0	28.0	44.0	500.0	4.0	28.0	-2.0	-11.0	-31.0	-25.0
Derby	23.0	61.0	44.0	3.0	500.0	20.0	-1.0	17.0	1.0	30.0
Jayapu	-20.0	41.0	15.0	28.0	20.0	500.0	35.0	20.0	-8.0	-5.0
Guam	-53.0	-1.0	-30.0	-13.0	-13.0	35.0	500.0	28.0	-8.0	-20.0
Manila	-39.0	10.0	-20.0	-22.0	8.0	25.0	28.0	500.0	39.0	18.0
Songkh	-55.0	-6.0	-27.0	-34.0	-3.0	-11.0	-6.0	40.0	500.0	27.0
Cocos	-7.0	18.0	4.0	-24.0	31.0	-4.0	-18.0	18.0	31.0	500.0

Time-of-day (UT) = 2  
Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	33.0	68.0	49.0	38.0	14.0	0.0	7.0	-9.0	21.0
Darwin	34.0	500.0	62.0	45.0	68.0	57.0	28.0	35.0	19.0	38.0
ASprin	68.0	61.0	500.0	63.0	63.0	32.0	13.0	18.0	9.0	26.0
TownsV	50.0	45.0	64.0	500.0	32.0	45.0	25.0	18.0	-2.0	11.0
Derby	38.0	68.0	62.0	32.0	500.0	37.0	24.0	35.0	23.0	45.0
Jayapu	15.0	57.0	33.0	44.0	38.0	500.0	50.0	33.0	19.0	25.0
Guam	-9.0	19.0	7.0	18.0	15.0	52.0	500.0	42.0	21.0	14.0
Manila	-1.0	27.0	13.0	11.0	31.0	40.0	41.0	500.0	54.0	38.0
Songkh	-5.0	18.0	4.0	-4.0	17.0	17.0	21.0	54.0	500.0	39.0
Cocos	21.0	38.0	26.0	22.0	45.0	24.0	14.0	37.0	42.0	500.0

Time-of-day (UT) = 2  
Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	30.0	64.0	61.0	54.0	33.0	17.0	26.0	16.0	37.0
Darwin	31.0	500.0	68.0	58.0	49.0	63.0	22.0	27.0	36.0	45.0
ASprin	64.0	68.0	500.0	68.0	69.0	13.0	30.0	33.0	28.0	40.0
TownsV	62.0	58.0	69.0	500.0	41.0	56.0	34.0	30.0	20.0	30.0
Derby	54.0	48.0	69.0	40.0	500.0	51.0	34.0	43.0	35.0	39.0
Jayapu	34.0	63.0	43.0	56.0	51.0	500.0	61.0	46.0	28.0	38.0
Guam	14.0	24.0	26.0	28.0	27.0	64.0	500.0	51.0	37.0	27.0
Manila	18.0	29.0	25.0	17.0	40.0	48.0	50.0	500.0	58.0	46.0
Songkh	19.0	32.0	21.0	18.0	28.0	25.0	35.0	57.0	500.0	49.0
Cocos	37.0	44.0	40.0	30.0	38.0	37.0	25.0	43.0	51.0	500.0

Time-of-day (UT) = 2  
Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	55.0	53.0	66.0	59.0	41.0	33.0	35.0	27.0	39.0
Darwin	56.0	500.0	48.0	63.0	47.0	61.0	46.0	50.0	35.0	52.0
ASprin	53.0	48.0	500.0	51.0	50.0	54.0	39.0	41.0	38.0	43.0
TownsV	67.0	63.0	51.0	500.0	55.0	60.0	25.0	39.0	32.0	37.0
Derby	59.0	46.0	50.0	55.0	500.0	54.0	27.0	50.0	41.0	58.0
Jayapu	42.0	61.0	54.0	60.0	55.0	500.0	59.0	55.0	39.0	44.0
Guam	27.0	42.0	33.0	27.0	29.0	61.0	500.0	54.0	45.0	34.0
Manila	22.0	46.0	35.0	34.0	44.0	56.0	54.0	500.0	61.0	51.0
Songkh	29.0	35.0	28.0	31.0	41.0	36.0	43.0	60.0	500.0	51.0
Cocos	39.0	51.0	43.0	37.0	57.0	43.0	36.0	51.0	56.0	500.0

Time-of-day (UT) = 2  
Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	59.0	49.0	50.0	30.0	51.0	41.0	42.0	38.0	-28.0
Darwin	60.0	500.0	51.0	66.0	38.0	32.0	54.0	56.0	19.0	56.0



ASprin	50.0	50.0	500.0	51.0	52.0	59.0	31.0	25.0	41.0	7.0
TownsV	50.0	66.0	51.0	500.0	60.0	64.0	51.0	22.0	39.0	40.0
Derby	30.0	37.0	52.0	60.0	500.0	60.0	22.0	56.0	-15.0	59.0
Jayapu	51.0	32.0	59.0	64.0	60.0	500.0	57.0	55.0	13.0	46.0
Guam	29.0	49.0	24.0	44.0	-1.0	58.0	500.0	60.0	48.0	42.0
Manila	34.0	52.0	7.0	-4.0	50.0	58.0	59.0	500.0	64.0	55.0
Songkh	40.0	2.0	39.0	38.0	7.0	11.0	47.0	64.0	500.0	56.0
Cocos	-27.0	55.0	7.0	40.0	59.0	45.0	41.0	55.0	60.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	49.0	39.0	49.0	-28.0	55.0	32.0	25.0	39.0	-50.0
Darwin	50.0	500.0	48.0	55.0	15.0	3.0	39.0	37.0	53.0	57.0
ASprin	39.0	47.0	500.0	48.0	48.0	62.0	20.0	53.0	21.0	53.0
TownsV	49.0	55.0	48.0	500.0	55.0	58.0	56.0	50.0	28.0	19.0
Derby	-28.0	15.0	49.0	55.0	500.0	61.0	54.0	50.0	52.0	45.0
Jayapu	55.0	3.0	62.0	58.0	61.0	500.0	61.0	42.0	39.0	27.0
Guam	27.0	36.0	-15.0	50.0	47.0	61.0	500.0	63.0	52.0	14.0
Manila	6.0	35.0	46.0	43.0	44.0	43.0	63.0	500.0	66.0	50.0
Songkh	41.0	51.0	8.0	24.0	50.0	37.0	50.0	66.0	500.0	48.0
Cocos	-49.0	57.0	53.0	-4.0	42.0	-4.0	8.0	50.0	49.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	34.0	13.0	45.0	-96.0	57.0	22.0	44.0	16.0	-999.0
Darwin	40.0	500.0	41.0	47.0	-34.0	-88.0	13.0	8.0	44.0	44.0
ASprin	13.0	41.0	500.0	41.0	41.0	53.0	54.0	46.0	3.0	40.0
TownsV	45.0	47.0	41.0	500.0	47.0	53.0	50.0	43.0	34.0	47.0
Derby	-96.0	-34.0	41.0	47.0	500.0	51.0	46.0	44.0	35.0	17.0
Jayapu	57.0	-88.0	53.0	53.0	51.0	500.0	63.0	37.0	40.0	46.0
Guam	-1.0	11.0	49.0	45.0	37.0	63.0	500.0	48.0	34.0	-35.0
Manila	35.0	7.0	38.0	32.0	27.0	37.0	48.0	500.0	58.0	38.0
Songkh	22.0	39.0	-35.0	30.0	38.0	38.0	36.0	58.0	500.0	33.0
Cocos	-999.0	44.0	40.0	44.0	6.0	39.0	-63.0	28.0	34.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	12.0	-44.0	37.0	-999.0	50.0	44.0	-14.0	-13.0	-999.0
Darwin	23.0	500.0	28.0	38.0	-999.0	-999.0	-24.0	-31.0	37.0	15.0
ASprin	-44.0	28.0	500.0	27.0	28.0	47.0	46.0	40.0	-23.0	14.0
TownsV	37.0	38.0	27.0	500.0	34.0	46.0	45.0	36.0	-4.0	-43.0
Derby	-999.0	-999.0	28.0	34.0	500.0	44.0	40.0	35.0	1.0	-24.0
Jayapu	50.0	-999.0	47.0	46.0	44.0	500.0	63.0	18.0	23.0	-15.0
Guam	36.0	-25.0	39.0	31.0	17.0	63.0	500.0	28.0	5.0	-999.0
Manila	-999.0	-31.0	22.0	12.0	-3.0	18.0	28.0	500.0	48.0	17.0

Songkh	6.0	22.0	-95.0	-50.0	22.0	21.0	17.0	48.0	500.0	8.0
Cocos	-999.0	15.0	15.0	-999.0	-44.0	-999.0	-999.0	-14.0	8.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-999.0	-9.0	-15.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Darwin	-999.0	500.0	-24.0	-25.0	-23.0	-26.0	-999.0	-999.0	-999.0	-999.0
ASprin	-11.0	-26.0	500.0	-6.0	-33.0	-999.0	-999.0	-999.0	-999.0	-999.0
TownsV	-13.0	-22.0	-2.0	500.0	-999.0	-62.0	-93.0	-999.0	-999.0	-999.0
Derby	-999.0	-25.0	-34.0	-999.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0
Jayapu	-999.0	-25.0	-999.0	-64.0	-999.0	500.0	-2.0	-999.0	-999.0	-999.0
Guam	-999.0	-999.0	-999.0	-90.0	-999.0	2.0	500.0	-94.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-95.0	500.0	-999.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-20.0	39.0	31.0	-23.0	-24.0	-57.0	-999.0	-999.0	-999.0
Darwin	-21.0	500.0	30.0	26.0	34.0	28.0	2.0	-44.0	-78.0	-89.0
ASprin	39.0	30.0	500.0	41.0	24.0	-10.0	-19.0	-53.0	-999.0	-85.0
TownsV	33.0	28.0	42.0	500.0	-17.0	32.0	7.0	-86.0	-999.0	-999.0
Derby	-23.0	34.0	24.0	-19.0	500.0	-19.0	-23.0	-58.0	-93.0	-83.0
Jayapu	-24.0	28.0	-9.0	31.0	-17.0	500.0	44.0	2.0	-999.0	-999.0
Guam	-55.0	-6.0	-21.0	-2.0	-32.0	45.0	500.0	14.0	-57.0	-999.0
Manila	-999.0	-44.0	-53.0	-88.0	-59.0	-3.0	12.0	500.0	5.0	-95.0
Songkh	-999.0	-78.0	-999.0	-999.0	-93.0	-999.0	-58.0	5.0	500.0	-999.0
Cocos	-999.0	-91.0	-85.0	-999.0	-84.0	-999.0	-98.0	-95.0	-999.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	17.0	59.0	47.0	26.0	13.0	-3.0	-27.0	-56.0	-23.0
Darwin	18.0	500.0	48.0	44.0	60.0	49.0	30.0	23.0	-13.0	-11.0
ASprin	60.0	48.0	500.0	56.0	46.0	30.0	18.0	0.0	-28.0	-16.0
TownsV	50.0	45.0	58.0	500.0	23.0	49.0	33.0	12.0	-32.0	-45.0
Derby	26.0	59.0	46.0	21.0	500.0	27.0	18.0	14.0	-15.0	5.0
Jayapu	15.0	50.0	31.0	48.0	29.0	500.0	58.0	37.0	-2.0	-18.0
Guam	0.0	26.0	15.0	26.0	10.0	59.0	500.0	39.0	1.0	-28.0
Manila	-33.0	17.0	-8.0	1.0	7.0	32.0	37.0	500.0	31.0	-13.0
Songkh	-68.0	-18.0	-40.0	-40.0	-25.0	-11.0	-1.0	31.0	500.0	-14.0
Cocos	-25.0	-14.0	-18.0	-49.0	4.0	-21.0	-25.0	-6.0	-6.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	37.0	65.0	56.0	39.0	31.0	16.0	10.0	-13.0	12.0
Darwin	38.0	500.0	61.0	52.0	64.0	60.0	40.0	38.0	9.0	21.0
ASprin	66.0	60.0	500.0	62.0	61.0	41.0	32.0	23.0	6.0	16.0
TownsV	59.0	53.0	64.0	500.0	38.0	55.0	41.0	31.0	7.0	2.0
Derby	39.0	63.0	60.0	36.0	500.0	41.0	31.0	33.0	9.0	32.0
Jayapu	33.0	60.0	42.0	55.0	43.0	500.0	59.0	43.0	22.0	16.0
Guam	21.0	39.0	30.0	41.0	31.0	62.0	500.0	47.0	22.0	4.0
Manila	4.0	35.0	19.0	26.0	30.0	40.0	45.0	500.0	38.0	17.0
Songkh	-21.0	7.0	-2.0	3.0	3.0	18.0	20.0	37.0	500.0	16.0
Cocos	10.0	19.0	14.0	-1.0	31.0	12.0	3.0	20.0	22.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	43.0	60.0	60.0	52.0	39.0	27.0	22.0	10.0	32.0
Darwin	45.0	500.0	63.0	58.0	67.0	60.0	45.0	42.0	24.0	38.0
ASprin	61.0	62.0	500.0	65.0	64.0	52.0	38.0	34.0	24.0	34.0
TownsV	62.0	59.0	67.0	500.0	45.0	60.0	47.0	37.0	20.0	19.0
Derby	53.0	66.0	63.0	43.0	500.0	52.0	38.0	38.0	25.0	43.0
Jayapu	42.0	60.0	53.0	59.0	53.0	500.0	60.0	44.0	33.0	34.0
Guam	34.0	45.0	40.0	48.0	40.0	64.0	500.0	51.0	33.0	20.0
Manila	22.0	42.0	33.0	34.0	35.0	46.0	49.0	500.0	52.0	28.0
Songkh	5.0	22.0	18.0	18.0	17.0	30.0	30.0	51.0	500.0	33.0
Cocos	30.0	35.0	32.0	16.0	42.0	30.0	16.0	28.0	33.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	54.0	49.0	63.0	58.0	45.0	37.0	33.0	27.0	39.0
Darwin	57.0	500.0	68.0	61.0	64.0	64.0	47.0	46.0	34.0	46.0
ASprin	50.0	67.0	500.0	62.0	68.0	57.0	43.0	39.0	33.0	41.0
TownsV	66.0	61.0	64.0	500.0	57.0	61.0	51.0	42.0	32.0	34.0
Derby	58.0	62.0	67.0	55.0	500.0	57.0	42.0	47.0	35.0	53.0
Jayapu	48.0	64.0	59.0	61.0	58.0	500.0	60.0	51.0	40.0	43.0
Guam	45.0	46.0	47.0	51.0	43.0	65.0	500.0	55.0	42.0	26.0
Manila	31.0	44.0	34.0	37.0	47.0	52.0	54.0	500.0	55.0	40.0
Songkh	22.0	35.0	24.0	27.0	34.0	36.0	38.0	53.0	500.0	41.0
Cocos	38.0	43.0	40.0	32.0	51.0	40.0	25.0	38.0	43.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	59.0	38.0	57.0	61.0	56.0	45.0	41.0	36.0	31.0
Darwin	60.0	500.0	62.0	65.0	58.0	68.0	54.0	54.0	-6.0	53.0
ASprin	38.0	61.0	500.0	54.0	60.0	61.0	49.0	47.0	38.0	46.0
TownsV	59.0	65.0	55.0	500.0	61.0	65.0	55.0	46.0	39.0	42.0

Derby	62.0	57.0	60.0	60.0	500.0	60.0	47.0	52.0	23.0	54.0
Jayapu	58.0	67.0	61.0	65.0	61.0	500.0	59.0	61.0	22.0	48.0
Guam	50.0	53.0	50.0	53.0	51.0	62.0	500.0	58.0	49.0	38.0
Manila	34.0	52.0	45.0	46.0	48.0	61.0	57.0	500.0	61.0	44.0
Songkh	26.0	-6.0	36.0	37.0	8.0	20.0	46.0	59.0	500.0	49.0
Cocos	32.0	52.0	45.0	40.0	54.0	47.0	37.0	47.0	52.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	62.0	14.0	46.0	51.0	37.0	51.0	47.0	29.0	8.0
Darwin	62.0	500.0	53.0	68.0	48.0	59.0	60.0	52.0	50.0	53.0
ASprin	14.0	53.0	500.0	39.0	49.0	64.0	39.0	34.0	20.0	48.0
TownsV	46.0	68.0	40.0	500.0	64.0	68.0	60.0	27.0	22.0	45.0
Derby	51.0	48.0	49.0	63.0	500.0	63.0	29.0	58.0	53.0	58.0
Jayapu	38.0	59.0	64.0	68.0	63.0	500.0	62.0	49.0	-28.0	50.0
Guam	52.0	58.0	37.0	58.0	10.0	63.0	500.0	63.0	52.0	15.0
Manila	42.0	51.0	26.0	6.0	54.0	49.0	63.0	500.0	64.0	50.0
Songkh	24.0	49.0	1.0	9.0	47.0	-29.0	51.0	64.0	500.0	44.0
Cocos	15.0	53.0	48.0	45.0	58.0	49.0	15.0	54.0	46.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	52.0	-22.0	30.0	36.0	60.0	53.0	34.0	18.0	49.0
Darwin	53.0	500.0	38.0	58.0	34.0	51.0	47.0	37.0	39.0	38.0
ASprin	-22.0	38.0	500.0	19.0	32.0	66.0	28.0	20.0	1.0	26.0
TownsV	30.0	58.0	19.0	500.0	64.0	60.0	61.0	56.0	4.0	48.0
Derby	36.0	34.0	32.0	64.0	500.0	65.0	58.0	59.0	47.0	61.0
Jayapu	61.0	51.0	66.0	60.0	65.0	500.0	60.0	24.0	-15.0	52.0
Guam	53.0	46.0	4.0	60.0	56.0	60.0	500.0	65.0	55.0	26.0
Manila	29.0	36.0	-15.0	53.0	57.0	24.0	65.0	500.0	55.0	45.0
Songkh	-3.0	38.0	-52.0	-41.0	42.0	-15.0	52.0	54.0	500.0	26.0
Cocos	49.0	38.0	27.0	48.0	61.0	52.0	27.0	47.0	28.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	39.0	-21.0	6.0	12.0	60.0	48.0	22.0	-1.0	-93.0
Darwin	42.0	500.0	17.0	48.0	18.0	40.0	26.0	9.0	19.0	59.0
ASprin	-21.0	17.0	500.0	-8.0	10.0	58.0	59.0	56.0	-28.0	3.0
TownsV	6.0	48.0	-8.0	500.0	53.0	54.0	54.0	48.0	-24.0	34.0
Derby	12.0	18.0	10.0	53.0	500.0	64.0	51.0	49.0	42.0	62.0
Jayapu	61.0	40.0	58.0	54.0	64.0	500.0	54.0	-13.0	-999.0	36.0
Guam	49.0	25.0	58.0	53.0	49.0	54.0	500.0	53.0	33.0	-999.0
Manila	-2.0	9.0	53.0	42.0	42.0	-13.0	53.0	500.0	44.0	30.0
Songkh	-52.0	18.0	-999.0	-999.0	29.0	-999.0	37.0	44.0	500.0	-4.0
Cocos	-53.0	59.0	7.0	34.0	62.0	36.0	-999.0	32.0	-2.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	15.0	50.0	40.0	23.0	14.0	10.0	0.0	-33.0	-19.0
Darwin	31.0	500.0	50.0	40.0	51.0	39.0	25.0	21.0	-10.0	6.0
ASprin	56.0	39.0	500.0	48.0	45.0	21.0	18.0	6.0	-16.0	-11.0
TownsV	51.0	36.0	54.0	500.0	27.0	38.0	26.0	11.0	-21.0	-10.0
Derby	29.0	41.0	45.0	21.0	500.0	18.0	15.0	13.0	-20.0	8.0
Jayapu	29.0	37.0	30.0	40.0	27.0	500.0	44.0	29.0	2.0	-8.0
Guam	19.0	16.0	21.0	22.0	17.0	39.0	500.0	34.0	9.0	-15.0
Manila	5.0	9.0	5.0	2.0	12.0	19.0	30.0	500.0	28.0	0.0
Songkh	-34.0	-28.0	-23.0	-35.0	-28.0	-15.0	-2.0	21.0	500.0	-15.0
Cocos	-28.0	-19.0	-25.0	-30.0	-7.0	-34.0	-33.0	-14.0	-22.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	31.0	56.0	45.0	37.0	22.0	19.0	22.0	9.0	21.0
Darwin	39.0	500.0	54.0	45.0	59.0	51.0	43.0	41.0	27.0	36.0
ASprin	59.0	48.0	500.0	54.0	56.0	36.0	35.0	34.0	25.0	34.0
TownsV	51.0	42.0	58.0	500.0	39.0	48.0	43.0	38.0	28.0	14.0
Derby	39.0	53.0	56.0	36.0	500.0	37.0	38.0	40.0	26.0	41.0
Jayapu	32.0	50.0	42.0	49.0	43.0	500.0	54.0	45.0	33.0	32.0
Guam	25.0	37.0	36.0	39.0	37.0	51.0	500.0	48.0	34.0	21.0
Manila	24.0	31.0	30.0	27.0	35.0	37.0	46.0	500.0	53.0	32.0
Songkh	6.0	15.0	18.0	17.0	18.0	14.0	28.0	48.0	500.0	29.0
Cocos	15.0	21.0	25.0	1.0	32.0	15.0	13.0	25.0	27.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	43.0	61.0	54.0	47.0	36.0	32.0	28.0	21.0	35.0
Darwin	48.0	500.0	61.0	54.0	64.0	57.0	50.0	49.0	35.0	46.0
ASprin	63.0	57.0	500.0	62.0	59.0	46.0	44.0	41.0	36.0	41.0
TownsV	58.0	52.0	64.0	500.0	47.0	55.0	49.0	44.0	36.0	31.0
Derby	50.0	60.0	59.0	45.0	500.0	48.0	45.0	47.0	38.0	49.0
Jayapu	43.0	57.0	50.0	57.0	51.0	500.0	57.0	51.0	44.0	45.0
Guam	38.0	47.0	45.0	49.0	47.0	56.0	500.0	53.0	44.0	38.0
Manila	34.0	44.0	39.0	40.0	44.0	48.0	52.0	500.0	54.0	39.0
Songkh	22.0	25.0	22.0	23.0	28.0	33.0	39.0	49.0	500.0	38.0
Cocos	29.0	36.0	34.0	23.0	43.0	33.0	30.0	36.0	38.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
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Adelad	500.0	50.0	64.0	58.0	53.0	44.0	39.0	36.0	31.0	44.0
Darwin	54.0	500.0	64.0	59.0	66.0	60.0	51.0	51.0	40.0	53.0
ASprin	66.0	61.0	500.0	65.0	62.0	53.0	45.0	44.0	40.0	50.0
TownsV	61.0	57.0	67.0	500.0	53.0	58.0	48.0	46.0	41.0	42.0
Derby	56.0	63.0	63.0	53.0	500.0	54.0	47.0	50.0	41.0	56.0
Jayapu	48.0	59.0	55.0	59.0	55.0	500.0	55.0	51.0	47.0	51.0
Guam	45.0	53.0	51.0	52.0	51.0	58.0	500.0	54.0	47.0	46.0
Manila	43.0	50.0	46.0	49.0	51.0	53.0	53.0	500.0	55.0	48.0
Songkh	33.0	35.0	34.0	35.0	34.0	43.0	44.0	51.0	500.0	45.0
Cocos	41.0	46.0	45.0	37.0	51.0	43.0	38.0	42.0	46.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	54.0	55.0	63.0	57.0	47.0	43.0	41.0	35.0	49.0
Darwin	59.0	500.0	67.0	63.0	62.0	62.0	52.0	51.0	43.0	56.0
ASprin	57.0	64.0	500.0	61.0	65.0	57.0	45.0	45.0	43.0	53.0
TownsV	65.0	61.0	62.0	500.0	57.0	60.0	51.0	46.0	43.0	48.0
Derby	60.0	60.0	66.0	57.0	500.0	57.0	46.0	50.0	44.0	60.0
Jayapu	52.0	61.0	59.0	62.0	58.0	500.0	57.0	50.0	48.0	55.0
Guam	50.0	55.0	53.0	57.0	52.0	61.0	500.0	54.0	50.0	50.0
Manila	49.0	54.0	51.0	51.0	54.0	54.0	54.0	500.0	56.0	52.0
Songkh	40.0	42.0	42.0	43.0	43.0	47.0	47.0	53.0	500.0	51.0
Cocos	48.0	51.0	50.0	45.0	56.0	48.0	41.0	45.0	50.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	57.0	42.0	57.0	60.0	47.0	45.0	44.0	39.0	53.0
Darwin	62.0	500.0	60.0	66.0	50.0	59.0	53.0	52.0	46.0	58.0
ASprin	43.0	56.0	500.0	53.0	59.0	60.0	46.0	45.0	45.0	56.0
TownsV	60.0	63.0	54.0	500.0	60.0	63.0	52.0	45.0	45.0	52.0
Derby	63.0	48.0	60.0	61.0	500.0	59.0	46.0	52.0	47.0	63.0
Jayapu	51.0	57.0	62.0	64.0	60.0	500.0	47.0	53.0	49.0	56.0
Guam	52.0	55.0	55.0	58.0	53.0	52.0	500.0	55.0	52.0	52.0
Manila	52.0	54.0	53.0	53.0	57.0	58.0	56.0	500.0	59.0	55.0
Songkh	43.0	46.0	48.0	49.0	46.0	49.0	50.0	56.0	500.0	54.0
Cocos	52.0	53.0	54.0	50.0	59.0	51.0	44.0	47.0	52.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	58.0	23.0	47.0	55.0	58.0	48.0	46.0	49.0	38.0
Darwin	63.0	500.0	50.0	59.0	29.0	49.0	57.0	56.0	48.0	58.0
ASprin	24.0	46.0	500.0	43.0	49.0	62.0	33.0	45.0	47.0	56.0
TownsV	49.0	56.0	44.0	500.0	63.0	57.0	55.0	37.0	47.0	53.0
Derby	57.0	26.0	50.0	63.0	500.0	62.0	31.0	54.0	49.0	63.0
Jayapu	61.0	48.0	64.0	59.0	63.0	500.0	33.0	56.0	39.0	56.0

Guam	51.0	58.0	37.0	61.0	35.0	35.0	500.0	58.0	54.0	52.0
Manila	52.0	57.0	54.0	43.0	59.0	60.0	60.0	500.0	63.0	40.0
Songkh	51.0	46.0	51.0	51.0	50.0	40.0	53.0	60.0	500.0	59.0
Cocos	38.0	55.0	56.0	52.0	61.0	52.0	46.0	33.0	57.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	49.0	-18.0	35.0	43.0	58.0	35.0	48.0	50.0	12.0
Darwin	52.0	500.0	33.0	49.0	5.0	31.0	54.0	59.0	6.0	45.0
ASprin	-17.0	30.0	500.0	26.0	31.0	56.0	9.0	28.0	45.0	40.0
TownsV	36.0	46.0	26.0	500.0	55.0	46.0	57.0	20.0	45.0	50.0
Derby	44.0	3.0	31.0	56.0	500.0	63.0	57.0	58.0	30.0	64.0
Jayapu	60.0	30.0	57.0	47.0	63.0	500.0	8.0	48.0	20.0	54.0
Guam	37.0	52.0	11.0	60.0	59.0	8.0	500.0	61.0	56.0	34.0
Manila	48.0	58.0	31.0	22.0	61.0	50.0	62.0	500.0	66.0	61.0
Songkh	48.0	4.0	50.0	51.0	16.0	20.0	55.0	64.0	500.0	61.0
Cocos	16.0	42.0	39.0	50.0	64.0	52.0	32.0	59.0	62.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	38.0	-21.0	16.0	22.0	52.0	12.0	29.0	41.0	-31.0
Darwin	39.0	500.0	6.0	34.0	-4.0	7.0	44.0	50.0	57.0	24.0
ASprin	-21.0	5.0	500.0	-9.0	5.0	45.0	56.0	2.0	24.0	20.0
TownsV	17.0	33.0	-9.0	500.0	45.0	26.0	50.0	53.0	26.0	31.0
Derby	22.0	-5.0	5.0	45.0	500.0	52.0	53.0	59.0	13.0	64.0
Jayapu	53.0	6.0	45.0	26.0	52.0	500.0	-22.0	35.0	29.0	38.0
Guam	12.0	43.0	56.0	50.0	53.0	-22.0	500.0	50.0	37.0	8.0
Manila	30.0	49.0	2.0	53.0	60.0	35.0	50.0	500.0	66.0	61.0
Songkh	40.0	55.0	14.0	18.0	-37.0	28.0	39.0	65.0	500.0	53.0
Cocos	-21.0	31.0	18.0	31.0	64.0	38.0	7.0	61.0	54.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	19.0	-20.0	-19.0	-8.0	43.0	-26.0	4.0	18.0	-90.0
Darwin	19.0	500.0	-20.0	13.0	-3.0	-19.0	27.0	37.0	44.0	60.0
ASprin	-20.0	-20.0	500.0	-15.0	-20.0	26.0	44.0	51.0	-4.0	56.0
TownsV	-19.0	13.0	-15.0	500.0	29.0	-1.0	37.0	-63.0	-2.0	43.0
Derby	-7.0	-4.0	-20.0	29.0	500.0	38.0	44.0	49.0	51.0	57.0
Jayapu	41.0	-19.0	26.0	0.0	39.0	500.0	-42.0	12.0	-67.0	17.0
Guam	-26.0	27.0	44.0	37.0	44.0	-42.0	500.0	35.0	14.0	-33.0
Manila	4.0	36.0	50.0	-63.0	49.0	12.0	35.0	500.0	54.0	50.0
Songkh	18.0	43.0	-37.0	-31.0	48.0	-67.0	27.0	54.0	500.0	37.0
Cocos	-72.0	62.0	56.0	43.0	57.0	17.0	-33.0	50.0	38.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	20.0	43.0	33.0	29.0	15.0	4.0	5.0	3.0	21.0
Darwin	33.0	500.0	41.0	33.0	44.0	36.0	25.0	31.0	20.0	35.0
ASprin	48.0	33.0	500.0	38.0	39.0	21.0	12.0	19.0	12.0	27.0
TownsV	43.0	29.0	43.0	500.0	27.0	30.0	16.0	18.0	8.0	16.0
Derby	36.0	37.0	41.0	23.0	500.0	21.0	23.0	25.0	21.0	36.0
Jayapu	27.0	35.0	28.0	33.0	28.0	500.0	40.0	32.0	20.0	27.0
Guam	12.0	21.0	20.0	23.0	23.0	35.0	500.0	30.0	15.0	18.0
Manila	10.0	22.0	21.0	15.0	30.0	23.0	27.0	500.0	40.0	34.0
Songkh	3.0	4.0	3.0	-3.0	11.0	6.0	7.0	35.0	500.0	34.0
Cocos	13.0	14.0	15.0	-1.0	23.0	5.0	4.0	23.0	27.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	34.0	55.0	44.0	40.0	27.0	24.0	27.0	24.0	37.0
Darwin	42.0	500.0	52.0	44.0	56.0	50.0	45.0	47.0	39.0	49.0
ASprin	58.0	47.0	500.0	51.0	50.0	36.0	38.0	40.0	37.0	42.0
TownsV	51.0	41.0	54.0	500.0	39.0	46.0	40.0	42.0	37.0	29.0
Derby	44.0	52.0	51.0	37.0	500.0	39.0	43.0	44.0	40.0	50.0
Jayapu	36.0	50.0	42.0	48.0	44.0	500.0	54.0	49.0	42.0	47.0
Guam	37.0	40.0	41.0	42.0	41.0	49.0	500.0	48.0	38.0	38.0
Manila	38.0	41.0	39.0	37.0	44.0	42.0	48.0	500.0	50.0	48.0
Songkh	30.0	28.0	30.0	24.0	33.0	33.0	36.0	47.0	500.0	49.0
Cocos	31.0	35.0	34.0	20.0	41.0	32.0	34.0	41.0	45.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	46.0	62.0	54.0	50.0	41.0	38.0	38.0	35.0	47.0
Darwin	52.0	500.0	61.0	54.0	63.0	57.0	52.0	53.0	45.0	56.0
ASprin	65.0	56.0	500.0	60.0	59.0	47.0	47.0	46.0	43.0	51.0
TownsV	60.0	52.0	62.0	500.0	49.0	55.0	48.0	47.0	43.0	41.0
Derby	54.0	59.0	60.0	48.0	500.0	50.0	49.0	50.0	45.0	58.0
Jayapu	47.0	56.0	52.0	57.0	53.0	500.0	55.0	52.0	48.0	53.0
Guam	48.0	50.0	49.0	49.0	50.0	53.0	500.0	54.0	47.0	47.0
Manila	47.0	50.0	48.0	47.0	52.0	51.0	55.0	500.0	55.0	53.0
Songkh	40.0	39.0	42.0	39.0	42.0	43.0	46.0	53.0	500.0	55.0
Cocos	44.0	46.0	48.0	36.0	52.0	44.0	43.0	46.0	51.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	54.0	66.0	61.0	58.0	49.0	45.0	44.0	39.0	53.0
Darwin	60.0	500.0	66.0	61.0	67.0	61.0	55.0	54.0	48.0	60.0



ASprin	68.0	63.0	500.0	66.0	65.0	56.0	50.0	49.0	47.0	56.0
TownsV	65.0	59.0	68.0	500.0	57.0	61.0	49.0	49.0	47.0	50.0
Derby	61.0	64.0	66.0	57.0	500.0	57.0	51.0	51.0	48.0	62.0
Jayapu	54.0	61.0	60.0	62.0	59.0	500.0	58.0	54.0	49.0	57.0
Guam	54.0	55.0	54.0	53.0	53.0	59.0	500.0	55.0	50.0	51.0
Manila	53.0	55.0	54.0	52.0	56.0	55.0	56.0	500.0	58.0	56.0
Songkh	46.0	47.0	49.0	47.0	50.0	49.0	51.0	56.0	500.0	59.0
Cocos	51.0	54.0	55.0	47.0	59.0	52.0	47.0	49.0	54.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	59.0	52.0	66.0	62.0	54.0	49.0	47.0	47.0	55.0
Darwin	63.0	500.0	70.0	66.0	64.0	66.0	57.0	55.0	50.0	61.0
ASprin	54.0	67.0	500.0	65.0	68.0	61.0	52.0	50.0	50.0	59.0
TownsV	68.0	64.0	66.0	500.0	62.0	64.0	49.0	49.0	49.0	54.0
Derby	64.0	62.0	69.0	62.0	500.0	62.0	52.0	51.0	50.0	64.0
Jayapu	57.0	65.0	63.0	65.0	63.0	500.0	52.0	55.0	49.0	60.0
Guam	55.0	57.0	55.0	52.0	54.0	54.0	500.0	57.0	52.0	51.0
Manila	55.0	58.0	56.0	54.0	57.0	59.0	59.0	500.0	61.0	58.0
Songkh	55.0	51.0	54.0	52.0	54.0	51.0	54.0	59.0	500.0	63.0
Cocos	54.0	57.0	58.0	54.0	62.0	56.0	48.0	51.0	58.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	63.0	21.0	60.0	64.0	56.0	51.0	49.0	50.0	53.0
Darwin	65.0	500.0	63.0	69.0	52.0	59.0	59.0	58.0	51.0	61.0
ASprin	22.0	61.0	500.0	54.0	61.0	64.0	40.0	50.0	51.0	59.0
TownsV	61.0	67.0	54.0	500.0	65.0	67.0	58.0	39.0	50.0	56.0
Derby	65.0	51.0	62.0	65.0	500.0	64.0	33.0	58.0	50.0	65.0
Jayapu	56.0	58.0	65.0	67.0	65.0	500.0	40.0	56.0	38.0	59.0
Guam	53.0	58.0	42.0	60.0	38.0	41.0	500.0	60.0	53.0	48.0
Manila	54.0	60.0	53.0	43.0	61.0	59.0	62.0	500.0	64.0	56.0
Songkh	56.0	52.0	55.0	53.0	55.0	40.0	56.0	63.0	500.0	63.0
Cocos	51.0	58.0	58.0	56.0	64.0	57.0	47.0	52.0	60.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	63.0	-17.0	43.0	54.0	35.0	35.0	47.0	50.0	22.0
Darwin	64.0	500.0	49.0	63.0	29.0	43.0	51.0	59.0	27.0	57.0
ASprin	-17.0	48.0	500.0	30.0	46.0	65.0	11.0	29.0	49.0	55.0
TownsV	43.0	62.0	30.0	500.0	66.0	60.0	57.0	12.0	46.0	56.0
Derby	55.0	28.0	47.0	66.0	500.0	65.0	-4.0	60.0	35.0	65.0
Jayapu	36.0	43.0	66.0	61.0	65.0	500.0	17.0	46.0	20.0	57.0
Guam	37.0	52.0	22.0	57.0	14.0	17.0	500.0	54.0	48.0	29.0
Manila	49.0	59.0	35.0	24.0	61.0	47.0	55.0	500.0	66.0	29.0

Songkh	54.0	27.0	51.0	48.0	35.0	21.0	50.0	66.0	500.0	64.0
Cocos	28.0	55.0	54.0	56.0	64.0	56.0	29.0	28.0	63.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	51.0	-24.0	12.0	36.0	62.0	5.0	25.0	43.0	-27.0
Darwin	52.0	500.0	25.0	52.0	3.0	18.0	34.0	45.0	-9.0	63.0
ASprin	-24.0	25.0	500.0	1.0	22.0	59.0	51.0	-7.0	28.0	30.0
TownsV	13.0	51.0	1.0	500.0	59.0	49.0	43.0	-38.0	22.0	52.0
Derby	40.0	2.0	22.0	59.0	500.0	63.0	48.0	55.0	7.0	64.0
Jayapu	62.0	17.0	60.0	49.0	63.0	500.0	-12.0	32.0	-12.0	43.0
Guam	17.0	41.0	52.0	47.0	49.0	-12.0	500.0	45.0	26.0	4.0
Manila	30.0	48.0	12.0	-8.0	55.0	32.0	45.0	500.0	57.0	60.0
Songkh	44.0	-9.0	28.0	22.0	7.0	-12.0	30.0	57.0	500.0	61.0
Cocos	-5.0	62.0	32.0	52.0	64.0	43.0	4.0	59.0	61.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	33.0	-23.0	-24.0	6.0	59.0	-45.0	-9.0	19.0	-99.0
Darwin	36.0	500.0	-3.0	33.0	-7.0	-12.0	5.0	25.0	-64.0	62.0
ASprin	-23.0	-3.0	500.0	-22.0	-8.0	49.0	37.0	-62.0	-4.0	-4.0
TownsV	-24.0	33.0	-22.0	500.0	48.0	28.0	22.0	-999.0	-15.0	31.0
Derby	14.0	-8.0	-8.0	48.0	500.0	50.0	31.0	43.0	-39.0	58.0
Jayapu	59.0	-12.0	50.0	28.0	50.0	500.0	-42.0	10.0	-58.0	21.0
Guam	-14.0	24.0	42.0	34.0	38.0	-42.0	500.0	29.0	0.0	-34.0
Manila	8.0	36.0	-22.0	-51.0	44.0	10.0	29.0	500.0	50.0	51.0
Songkh	19.0	-64.0	-4.0	-15.0	-39.0	-58.0	12.0	50.0	500.0	49.0
Cocos	-54.0	61.0	6.0	31.0	58.0	21.0	-34.0	51.0	49.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	4.0	-23.0	-55.0	-30.0	47.0	-999.0	-60.0	-14.0	-999.0
Darwin	13.0	500.0	-30.0	8.0	-7.0	-38.0	-31.0	-5.0	-999.0	59.0
ASprin	-23.0	-30.0	500.0	-22.0	-35.0	33.0	15.0	-999.0	-52.0	-52.0
TownsV	-55.0	8.0	-22.0	500.0	31.0	1.0	-8.0	-999.0	-70.0	4.0
Derby	-18.0	-7.0	-35.0	31.0	500.0	34.0	5.0	25.0	-99.0	50.0
Jayapu	48.0	-38.0	33.0	1.0	34.0	500.0	-55.0	-17.0	-999.0	-14.0
Guam	-55.0	1.0	29.0	15.0	23.0	-55.0	500.0	7.0	-36.0	-84.0
Manila	-23.0	18.0	-66.0	-999.0	25.0	-17.0	7.0	500.0	40.0	38.0
Songkh	-14.0	-999.0	-52.0	-70.0	-98.0	-999.0	-12.0	40.0	500.0	35.0
Cocos	-999.0	58.0	-32.0	4.0	50.0	-14.0	-84.0	38.0	35.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	23.0	52.0	44.0	30.0	18.0	4.0	7.0	-1.0	21.0
Darwin	37.0	500.0	46.0	45.0	48.0	43.0	30.0	34.0	20.0	34.0
ASprin	58.0	38.0	500.0	50.0	41.0	26.0	23.0	23.0	10.0	27.0
TownsV	51.0	37.0	51.0	500.0	29.0	41.0	27.0	23.0	8.0	19.0
Derby	40.0	44.0	46.0	32.0	500.0	30.0	27.0	29.0	19.0	39.0
Jayapu	30.0	41.0	32.0	46.0	32.0	500.0	43.0	34.0	20.0	32.0
Guam	16.0	26.0	27.0	29.0	25.0	42.0	500.0	36.0	17.0	16.0
Manila	22.0	28.0	28.0	25.0	32.0	31.0	35.0	500.0	38.0	34.0
Songkh	7.0	9.0	10.0	6.0	15.0	10.0	15.0	36.0	500.0	37.0
Cocos	19.0	18.0	20.0	12.0	29.0	15.0	12.0	17.0	30.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	39.0	58.0	51.0	44.0	32.0	28.0	32.0	25.0	40.0
Darwin	47.0	500.0	57.0	50.0	58.0	55.0	47.0	50.0	40.0	51.0
ASprin	61.0	52.0	500.0	58.0	54.0	43.0	41.0	43.0	37.0	46.0
TownsV	55.0	46.0	58.0	500.0	42.0	51.0	44.0	43.0	33.0	35.0
Derby	49.0	56.0	56.0	44.0	500.0	45.0	44.0	47.0	40.0	52.0
Jayapu	41.0	53.0	46.0	54.0	46.0	500.0	53.0	50.0	41.0	47.0
Guam	38.0	43.0	42.0	43.0	42.0	51.0	500.0	51.0	43.0	40.0
Manila	41.0	45.0	43.0	42.0	45.0	47.0	50.0	500.0	52.0	48.0
Songkh	32.0	32.0	34.0	29.0	35.0	35.0	40.0	50.0	500.0	49.0
Cocos	38.0	40.0	40.0	30.0	45.0	38.0	37.0	40.0	44.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	50.0	62.0	58.0	53.0	44.0	42.0	45.0	39.0	50.0
Darwin	56.0	500.0	63.0	58.0	63.0	58.0	53.0	57.0	48.0	57.0
ASprin	65.0	59.0	500.0	64.0	61.0	52.0	48.0	51.0	47.0	54.0
TownsV	62.0	55.0	64.0	500.0	53.0	57.0	48.0	51.0	46.0	48.0
Derby	57.0	61.0	63.0	54.0	500.0	53.0	50.0	52.0	48.0	60.0
Jayapu	50.0	57.0	56.0	58.0	55.0	500.0	57.0	56.0	49.0	55.0
Guam	48.0	50.0	49.0	47.0	48.0	56.0	500.0	57.0	50.0	49.0
Manila	49.0	51.0	49.0	48.0	49.0	52.0	54.0	500.0	59.0	53.0
Songkh	41.0	42.0	44.0	42.0	45.0	44.0	47.0	59.0	500.0	57.0
Cocos	48.0	49.0	50.0	44.0	54.0	48.0	46.0	49.0	55.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	57.0	51.0	63.0	61.0	51.0	47.0	50.0	49.0	54.0
Darwin	61.0	500.0	66.0	65.0	61.0	63.0	57.0	59.0	51.0	59.0
ASprin	53.0	64.0	500.0	59.0	66.0	59.0	50.0	54.0	51.0	57.0
TownsV	65.0	63.0	60.0	500.0	60.0	62.0	36.0	53.0	51.0	54.0

Derby	62.0	59.0	67.0	60.0	500.0	59.0	50.0	58.0	51.0	63.0
Jayapu	54.0	62.0	61.0	63.0	60.0	500.0	52.0	60.0	51.0	57.0
Guam	50.0	55.0	51.0	37.0	49.0	52.0	500.0	60.0	52.0	50.0
Manila	52.0	55.0	52.0	50.0	56.0	56.0	58.0	500.0	63.0	51.0
Songkh	50.0	47.0	49.0	47.0	49.0	48.0	50.0	64.0	500.0	61.0
Cocos	52.0	54.0	55.0	51.0	60.0	52.0	48.0	51.0	59.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	61.0	29.0	51.0	56.0	59.0	36.0	47.0	46.0	37.0
Darwin	63.0	500.0	57.0	61.0	54.0	55.0	57.0	59.0	32.0	62.0
ASprin	30.0	56.0	500.0	49.0	56.0	63.0	32.0	38.0	45.0	55.0
TownsV	52.0	60.0	49.0	500.0	64.0	59.0	55.0	35.0	47.0	55.0
Derby	57.0	53.0	57.0	63.0	500.0	62.0	30.0	59.0	25.0	63.0
Jayapu	61.0	54.0	64.0	59.0	63.0	500.0	40.0	58.0	37.0	54.0
Guam	38.0	56.0	33.0	55.0	30.0	40.0	500.0	53.0	39.0	45.0
Manila	47.0	57.0	37.0	35.0	58.0	57.0	52.0	500.0	64.0	22.0
Songkh	46.0	30.0	44.0	45.0	29.0	35.0	38.0	64.0	500.0	61.0
Cocos	35.0	60.0	54.0	54.0	62.0	53.0	44.0	11.0	61.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	52.0	-1.0	33.0	45.0	59.0	19.0	28.0	27.0	12.0
Darwin	52.0	500.0	44.0	53.0	39.0	43.0	46.0	50.0	-2.0	61.0
ASprin	-1.0	44.0	500.0	29.0	43.0	56.0	8.0	17.0	23.0	34.0
TownsV	33.0	53.0	29.0	500.0	56.0	52.0	45.0	13.0	27.0	47.0
Derby	48.0	38.0	43.0	55.0	500.0	56.0	49.0	51.0	-34.0	63.0
Jayapu	59.0	43.0	56.0	52.0	57.0	500.0	18.0	47.0	17.0	37.0
Guam	20.0	46.0	9.0	45.0	49.0	18.0	500.0	41.0	21.0	24.0
Manila	28.0	49.0	18.0	14.0	51.0	46.0	41.0	500.0	51.0	49.0
Songkh	24.0	-3.0	17.0	23.0	-7.0	4.0	20.0	51.0	500.0	58.0
Cocos	-10.0	61.0	23.0	47.0	62.0	36.0	24.0	48.0	58.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	41.0	-22.0	5.0	27.0	50.0	-9.0	5.0	6.0	-28.0
Darwin	41.0	500.0	24.0	40.0	20.0	25.0	32.0	39.0	-58.0	59.0
ASprin	-22.0	24.0	500.0	5.0	23.0	49.0	-30.0	-14.0	-2.0	53.0
TownsV	5.0	40.0	5.0	500.0	47.0	39.0	32.0	-21.0	4.0	26.0
Derby	33.0	20.0	23.0	47.0	500.0	49.0	39.0	41.0	-999.0	54.0
Jayapu	51.0	25.0	49.0	39.0	49.0	500.0	-11.0	33.0	-13.0	19.0
Guam	-7.0	33.0	-26.0	33.0	40.0	-12.0	500.0	24.0	-7.0	0.0
Manila	7.0	38.0	-11.0	-18.0	42.0	33.0	24.0	500.0	37.0	35.0
Songkh	-10.0	-58.0	-24.0	-13.0	-65.0	-50.0	-9.0	37.0	500.0	44.0
Cocos	-89.0	58.0	52.0	26.0	54.0	19.0	0.0	25.0	39.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	24.0	-21.0	-25.0	1.0	41.0	-48.0	-27.0	-25.0	-82.0
Darwin	24.0	500.0	3.0	21.0	1.0	4.0	13.0	23.0	-999.0	50.0
ASprin	-21.0	2.0	500.0	-18.0	1.0	37.0	-77.0	-55.0	-37.0	45.0
TownsV	-25.0	21.0	-18.0	500.0	33.0	22.0	13.0	-66.0	-28.0	4.0
Derby	12.0	1.0	1.0	33.0	500.0	39.0	25.0	27.0	-999.0	37.0
Jayapu	42.0	4.0	37.0	22.0	39.0	500.0	-42.0	14	-54.0	-6.0
Guam	-44.0	14.0	-72.0	15.0	26.0	-42.0	500.0		-46.0	-35.0
Manila	-24.0	23.0	-51.0	-62.0	28.0	14.0	0.0	500.	18.0	12.0
Songkh	-63.0	-999.0	-85.0	-68.0	-999.0	-999.0	-50.0	18.0	500.0	26.0
Cocos	-999.0	46.0	38.0	4.0	37.0	-6.0	-35.0	-13.0	9.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	3.0	-21.0	-53.0	-27.0	28.0	-97.0	-68.0	-66.0	-999.0
Darwin	3.0	500.0	-19.0	-1.0	-4.0	-18.0	-12.0	3.0	-999.0	43.0
ASprin	-21.0	-19.0	500.0	-19.0	-21.0	22.0	-999.0	-999.0	-83.0	35.0
TownsV	-53.0	-1.0	-19.0	500.0	15.0	1.0	-11.0	-999.0	-70.0	-26.0
Derby	-13.0	-4.0	-21.0	15.0	500.0	24.0	6.0	8.0	-999.0	11.0
Jayapu	31.0	-18.0	22.0	1.0	24.0	500.0	-62.0	-9.0	-999.0	-40.0
Guam	-91.0	-9.0	-999.0	-8.0	7.0	-62.0	500.0	-27.0	-94.0	-79.0
Manila	-63.0	3.0	-98.0	-999.0	10.0	-9.0	-27.0	500.0	-7.0	-19.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-99.0	-7.0	500.0	1.0
Cocos	-999.0	26.0	13.0	-26.0	11.0	-40.0	-79.0	-59.0	-31.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-21.0	-21.0	-53.0	-56.0	10.0	-999.0	-999.0	-999.0	-999.0
Darwin	-21.0	500.0	-25.0	-23.0	-3.0	-36.0	-39.0	-21.0	-999.0	33.0
ASprin	-21.0	-25.0	500.0	-18.0	-29.0	3.0	-999.0	-999.0	-999.0	21.0
TownsV	-53.0	-23.0	-18.0	500.0	-6.0	-21.0	-38.0	-999.0	-999.0	-63.0
Derby	-39.0	-3.0	-29.0	-6.0	500.0	6.0	-18.0	-14.0	-999.0	-22.0
Jayapu	16.0	-36.0	3.0	-21.0	6.0	500.0	-62.0	-36.0	-999.0	-79.0
Guam	-999.0	-35.0	-999.0	-35.0	-15.0	-62.0	500.0	-56.0	-999.0	-999.0
Manila	-999.0	-21.0	-999.0	-999.0	-11.0	-36.0	-56.0	500.0	-33.0	-54.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-33.0	500.0	-29.0
Cocos	-999.0	-2.0	-20.0	-63.0	-22.0	-79.0	-999.0	-999.0	-73.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
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Adelad	500.0	-25.0	27.0	8.0	-14.0	-51.0	-98.0	-77.0	-78.0	-36.0
Darwin	-23.0	500.0	34.0	18.0	49.0	27.0	-24.0	-5.0	-6.0	12.0
ASprin	28.0	33.0	500.0	25.0	35.0	-24.0	-77.0	-47.0	-34.0	-15.0
TownsV	9.0	17.0	25.0	500.0	-19.0	8.0	-65.0	-75.0	-75.0	-45.0
Derby	-13.0	49.0	36.0	-18.0	500.0	-5.0	-47.0	-3.0	-2.0	24.0
Jayapu	-51.0	26.0	-24.0	8.0	-6.0	500.0	20.0	-8.0	-22.0	-17.0
Guam	-95.0	-24.0	-75.0	-63.0	-46.0	22.0	500.0	7.0	-3.0	-24.0
Manila	-65.0	4.0	-40.0	-64.0	6.0	3.0	15.0	500.0	38.0	24.0
Songkh	-66.0	3.0	-24.0	-60.0	16.0	-3.0	7.0	37.0	500.0	34.0
Cocos	-30.0	15.0	-9.0	-41.0	28.0	-13.0	-22.0	17.0	28.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	25.0	56.0	45.0	30.0	12.0	-11.0	-5.0	-9.0	14.0
Darwin	30.0	500.0	59.0	49.0	64.0	55.0	31.0	33.0	22.0	38.0
ASprin	58.0	57.0	500.0	59.0	57.0	29.0	11.0	16.0	12.0	30.0
TownsV	47.0	47.0	58.0	500.0	27.0	43.0	14.0	9.0	0.0	7.0
Derby	34.0	64.0	60.0	30.0	500.0	37.0	26.0	34.0	28.0	45.0
Jayapu	16.0	54.0	31.0	45.0	36.0	500.0	52.0	30.0	17.0	26.0
Guam	-8.0	28.0	15.0	10.0	25.0	51.0	500.0	40.0	30.0	18.0
Manila	3.0	37.0	20.0	11.0	36.0	38.0	47.0	500.0	50.0	39.0
Songkh	5.0	29.0	19.0	11.0	30.0	32.0	36.0	49.0	500.0	47.0
Cocos	22.0	40.0	34.0	15.0	47.0	29.0	22.0	35.0	45.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	41.0	67.0	58.0	43.0	35.0	20.0	21.0	21.0	34.0
Darwin	44.0	500.0	67.0	61.0	68.0	63.0	47.0	47.0	38.0	48.0
ASprin	68.0	66.0	500.0	68.0	65.0	44.0	35.0	36.0	35.0	43.0
TownsV	59.0	59.0	68.0	500.0	41.0	58.0	38.0	32.0	28.0	30.0
Derby	46.0	68.0	67.0	44.0	500.0	51.0	42.0	44.0	41.0	54.0
Jayapu	37.0	62.0	45.0	59.0	50.0	500.0	62.0	44.0	36.0	44.0
Guam	24.0	47.0	39.0	35.0	43.0	63.0	500.0	51.0	42.0	38.0
Manila	25.0	49.0	37.0	35.0	46.0	52.0	56.0	500.0	55.0	46.0
Songkh	26.0	42.0	38.0	34.0	42.0	43.0	42.0	53.0	500.0	54.0
Cocos	40.0	49.0	45.0	36.0	55.0	44.0	38.0	42.0	52.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	54.0	72.0	64.0	56.0	42.0	28.0	37.0	27.0	44.0
Darwin	55.0	500.0	70.0	64.0	54.0	65.0	54.0	55.0	43.0	52.0
ASprin	72.0	69.0	500.0	71.0	69.0	56.0	43.0	46.0	43.0	49.0
TownsV	65.0	63.0	71.0	500.0	55.0	62.0	47.0	44.0	40.0	42.0
Derby	57.0	54.0	69.0	56.0	500.0	57.0	49.0	50.0	43.0	58.0
Jayapu	44.0	65.0	56.0	62.0	57.0	500.0	63.0	53.0	42.0	49.0

Guam	33.0	55.0	47.0	46.0	51.0	65.0	500.0	57.0	29.0	47.0
Manila	40.0	56.0	47.0	46.0	52.0	58.0	58.0	500.0	41.0	33.0
Songkh	25.0	44.0	42.0	40.0	42.0	41.0	32.0	39.0	500.0	56.0
Cocos	46.0	52.0	50.0	44.0	58.0	48.0	42.0	29.0	55.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	59.0	56.0	68.0	61.0	48.0	39.0	45.0	23.0	33.0
Darwin	60.0	500.0	58.0	67.0	45.0	61.0	59.0	59.0	23.0	36.0
ASprin	56.0	58.0	500.0	59.0	57.0	60.0	48.0	51.0	16.0	38.0
TownsV	68.0	67.0	60.0	500.0	60.0	64.0	51.0	50.0	25.0	45.0
Derby	61.0	44.0	57.0	60.0	500.0	61.0	52.0	-5.0	17.0	61.0
Jayapu	50.0	61.0	60.0	64.0	61.0	500.0	67.0	56.0	-22.0	49.0
Guam	42.0	60.0	51.0	49.0	54.0	68.0	500.0	61.0	-37.0	44.0
Manila	46.0	58.0	51.0	49.0	17.0	59.0	61.0	500.0	16.0	50.0
Songkh	27.0	22.0	28.0	28.0	18.0	17.0	9.0	14.0	500.0	49.0
Cocos	34.0	35.0	38.0	46.0	60.0	47.0	38.0	48.0	48.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	62.0	36.0	60.0	54.0	21.0	47.0	45.0	-88.0	42.0
Darwin	62.0	500.0	51.0	59.0	21.0	27.0	60.0	61.0	-6.0	56.0
ASprin	37.0	51.0	500.0	55.0	49.0	63.0	51.0	18.0	-999.0	19.0
TownsV	60.0	59.0	55.0	500.0	63.0	67.0	35.0	50.0	-83.0	14.0
Derby	54.0	21.0	49.0	63.0	500.0	63.0	31.0	56.0	-17.0	52.0
Jayapu	18.0	27.0	63.0	67.0	63.0	500.0	73.0	62.0	-999.0	-23.0
Guam	49.0	60.0	52.0	38.0	31.0	73.0	500.0	63.0	-999.0	-10.0
Manila	49.0	61.0	26.0	53.0	57.0	63.0	63.0	500.0	-21.0	40.0
Songkh	8.0	-6.0	6.0	10.0	-14.0	-17.0	-31.0	-21.0	500.0	36.0
Cocos	42.0	56.0	19.0	30.0	52.0	27.0	18.0	39.0	36.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	45.0	-24.0	49.0	32.0	58.0	44.0	-10.0	-999.0	-19.0
Darwin	45.0	500.0	41.0	48.0	-7.0	-29.0	61.0	44.0	-49.0	47.0
ASprin	-24.0	40.0	500.0	45.0	35.0	50.0	-3.0	35.0	-999.0	-13.0
TownsV	49.0	48.0	45.0	500.0	47.0	42.0	60.0	-10.0	-999.0	-71.0
Derby	23.0	-7.0	35.0	47.0	500.0	44.0	-48.0	26.0	-67.0	41.0
Jayapu	59.0	-29.0	51.0	42.0	44.0	500.0	60.0	51.0	-999.0	-999.0
Guam	45.0	62.0	-3.0	58.0	-48.0	60.0	500.0	41.0	-999.0	-999.0
Manila	9.0	44.0	37.0	12.0	37.0	51.0	41.0	500.0	-58.0	25.0
Songkh	-23.0	-49.0	-28.0	-21.0	-62.0	-66.0	-87.0	-58.0	500.0	17.0
Cocos	-19.0	47.0	-13.0	12.0	43.0	4.0	-9.0	23.0	17.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	8.0	-23.0	34.0	-8.0	51.0	7.0	-999.0	-999.0	-65.0
Darwin	8.0	500.0	17.0	40.0	-7.0	-40.0	49.0	18.0	-999.0	38.0
ASprin	-23.0	17.0	500.0	20.0	3.0	14.0	55.0	-999.0	-999.0	-57.0
TownsV	34.0	40.0	20.0	500.0	13.0	24.0	58.0	-999.0	-999.0	-999.0
Derby	-30.0	-7.0	3.0	13.0	500.0	-1.0	47.0	-38.0	-999.0	25.0
Jayapu	50.0	-40.0	15.0	24.0	-1.0	500.0	50.0	31.0	-999.0	-999.0
Guam	-12.0	51.0	55.0	58.0	47.0	50.0	500.0	10.0	-999.0	-999.0
Manila	-50.0	18.0	-999.0	-45.0	4.0	31.0	10.0	500.0	-73.0	2.0
Songkh	-67.0	-999.0	-75.0	-64.0	-999.0	-999.0	-999.0	-73.0	500.0	-10.0
Cocos	-65.0	38.0	-57.0	-15.0	29.0	-29.0	-48.0	0.0	-10.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-45.0	-23.0	-5.0	-54.0	29.0	-47.0	-999.0	-999.0	-999.0
Darwin	-44.0	500.0	-27.0	24.0	-6.0	-39.0	18.0	-23.0	-999.0	24.0
ASprin	-23.0	-27.0	500.0	-19.0	-33.0	-40.0	37.0	-999.0	-999.0	-999.0
TownsV	-5.0	24.0	-19.0	500.0	-37.0	-12.0	39.0	-999.0	-999.0	-999.0
Derby	-84.0	-6.0	-33.0	-37.0	500.0	-59.0	16.0	-999.0	-999.0	4.0
Jayapu	23.0	-39.0	-40.0	-12.0	-59.0	500.0	27.0	-2.0	-999.0	-999.0
Guam	-999.0	34.0	37.0	44.0	16.0	27.0	500.0	-32.0	-999.0	-999.0
Manila	-999.0	-23.0	-999.0	-999.0	-43.0	-2.0	-32.0	500.0	-73.0	-25.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-73.0	500.0	-40.0
Cocos	-999.0	24.0	-999.0	-51.0	11.0	-71.0	-96.0	-28.0	-40.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-90.0	-22.0	-58.0	-84.0	-9.0	-999.0	-999.0	-999.0	-999.0
Darwin	-90.0	500.0	-28.0	-8.0	-6.0	-39.0	-34.0	-69.0	-999.0	6.0
ASprin	-22.0	-28.0	500.0	-18.0	-33.0	-80.0	0.0	-999.0	-999.0	-999.0
TownsV	-58.0	-8.0	-18.0	500.0	-83.0	-58.0	3.0	-999.0	-999.0	-999.0
Derby	-84.0	-6.0	-33.0	-83.0	500.0	-84.0	-37.0	-999.0	-999.0	-21.0
Jayapu	-27.0	-39.0	-80.0	-58.0	-84.0	500.0	-35.0	-44.0	-999.0	-999.0
Guam	-999.0	7.0	0.0	26.0	-37.0	-35.0	500.0	-75.0	-999.0	-999.0
Manila	-999.0	-70.0	-999.0	-999.0	-92.0	-44.0	-75.0	500.0	-72.0	-55.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-72.0	500.0	-72.0
Cocos	-999.0	6.0	-999.0	-94.0	-11.0	-999.0	-999.0	-59.0	-72.0	500.0



Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 12  
 Sunspot Number = 50.00  
 Required SNR (dB-Hz) for comm = 20.0

Time-of-day (UT) = 2

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad		2	234	12349	1234579	123456789	12345678	1235678	13567	356
1 Darwin		4	2345	02345679	023456789	023456789	02345679	0236789	02389	0238
2 ASprin		0	0134	013459	013456789	013456789	01345678	013456789	1345679	134567
3 Townsv			0125	012456	012456789	012456789	012456789	01245678	012456789	0124567
4 Derby		1	01259	012356789	012356789	012356789	01235679	2356789	235678	23567
5 Jayapu			13467	1234679	012346789	012346789	01234679	02346789	02346789	023468
6 Guam			57	578	12345789	012345789	01235789	0134578	234578	02357
7 Manila		8	568	145689	1245689	012345689	0145689	12345689	02345689	268
8 Songkh		7	79	679	1245679	012345679	023679	01345679	01345679	1457
9 Cocos			48	0124578	012345678	012345678	1345678	12478	123578	

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 6

For each Tx node and freq, list the Rx nodes that can be communicated with.

Step 3 Results for: Month = December, Sunspot # = 50, Required SNR = 20 dB-Hz, 20DEC50.OUT

B-3a-1

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad		23	234	12345	12345679	123456789	123456789	1345678	1345679	1567
1 Darwin		2345	234567	02345679	023456789	023456789	023456789	023456789	023456789	03569
2 ASprin		0134	01345	0134567	013456789	013456789	013456789	13456789	145679	567
3 Townsv		0125	012456	0124567	01245678	012456789	012456789	012456789	0145679	145679
4 Derby		12	01235	01235679	012356789	012356789	012356789	012356789	012356789	356789
5 Jayapu		136	123467	01234678	012346789	012346789	012346789	01234679	01234679	0123469
6 Guam		5	1357	01234578	012345789	012345789	012345789	0123578	01345789	01234578
7 Manila			568	134568	012345689	012345689	012345689	01245689	01345689	234689
8 Songkh			7	67	15679	012345679	0235679	014679	14679	467
9 Cocos				478	0124578	012345678	012345678	1234578	012345678	13457

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	234	1234579	123456789	123456789	123456789	123456789	123456789	1345678	14578	5
1 Darwin	0234567	023456789	023456789	023456789	023456789	023456789	023456789	0235679	036789	6789
2 ASprin	01345	013456789	013456789	013456789	013456789	013456789	013456789	1345789	5689	5679
3 Townsv	012456	01245678	012456789	012456789	012456789	012456789	012456789	012456789	1456789	469
4 Derby	0123	012356789	012356789	012356789	012356789	012356789	012356789	02356789	035679	356789
5 Jayapu	0123467	012346789	012346789	012346789	012346789	012346789	012346789	01234789	0234789	024
6 Guam	2357	012345789	012345789	012345789	012345789	012345789	012345789	0134789	123478	12347
7 Manila	68	012345689	012345689	012345689	012345689	012345689	012345689	012345689	01345689	124689
8 Songkh	7	679	012345679	012345679	012345679	012345679	012345679	0235679	015679	14679

Step 3 Results for: Month = December, Sunspot # = 50, Required SNR = 20 dB-Hz, 20DEC50.OUT

B-3a-2

9 Cocos 12478 012345678 012345678 012345678 012345678 012345678 012345678 134578 123478

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) - 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	12349	123456789	123456789	123456789	123456789	123456789	13456789	14578	15	5
1 Darwin	023456789	023456789	023456789	023456789	023456789	023456789	023456789	023679	0379	9
2 ASprin	013459	013456789	013456789	013456789	013456789	013456789	1345789	145689	56	5
3 Townsv	01245	012456789	012456789	012456789	012456789	012456789	01245689	145689	14569	4
4 Derby	012356789	012356789	012356789	012356789	012356789	012356789	01235789	0235679	35679	3579
5 Jayapu	012346789	012346789	012346789	012346789	012346789	012346789	01234789	023479	02349	024
6 Guam	123457	012345789	012345789	012345789	012345789	012345789	0123789	123478	12347	24
7 Manila	1245689	012345689	012345689	012345689	012345689	012345689	012345689	0145689	14689	489
8 Songkh	79	012345679	012345679	012345679	012345679	012345679	012345679	023679	79	79
9 Cocos	478	012345678	012345678	012345678	012345678	012345678	012345678	1234578	134578	1478

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9



For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	2	1234	123456789	123456789	123456789	12345679	13456	35	5	
1 Darwin	245	023456789	023456789	023456789	023456789	02345679	023679	369	39	
2 ASprin	0134	013459	013456789	013456789	01345679	013456	13457	36	6	
3 Townsv	2	01245	012456789	012456789	012456789	0124567	012456	01256	16	
4 Derby	129	012356789	012356789	012356789	0123569	01235679	023579	69		
5 Jayapu	16	1234679	012346789	012346789	01234679	123467	023467	0367	06	
6 Guam	5	14578	012345789	012345789	01234579	0123457	01357	12345	1235	3
7 Manila	89	1245689	012345689	012345689	0123569	01234569	124569	5		
8 Songkh	79	145679	012345679	012345679	01239	9				
9 Cocos	48	01245678	012345678	012345678	012345678	0134578	147	14	1	

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 12  
 Sunspot Number = 50.00  
 Required SNR (dB-Hz) for comm = 40.0

Time-of-day (UT) = 2

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			2	23	234	12345	123567	135	357	56
1 Darwin			245	2345	23459	02345679	023679	02389	02389	
2 ASprin			0134	0134	013459	0134579	013458	134579	1345679	567
3 Townsv			2	0125	01245	01245	0124569	0124567	01245679	56
4 Derby			12	129	012357	01235789	23579	2356789	23567	56
5 Jayapu			1	136	123467	01234679	0234679	023467	0234689	02346
6 Guam				57	57	1578	135789	34578	2357	5
7 Manila				568	45689	145689	145689	2345689	68	8
8 Songkh			7	7	79	4679	0679	014679	7	7
9 Cocos				48	1278	124578	1345678	12478	123	

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	6	7	7	7	7	7	7	7	7	7
1 Darwin	8	9	9	9	9	9	9	9	9	9
2 ASprin	7	9	9	9	9	9	9	9	9	9
3 Townsv	8	8	8	8	8	8	8	8	8	8
4 Derby	8	9	9	9	9	9	9	9	9	9
5 Jayapu	8	9	9	9	9	9	9	9	9	9
6 Guam	6	7	8	8	8	8	8	8	8	8
7 Manila	7	8	8	8	8	8	8	8	8	8
8 Songkh	6	6	6	6	6	6	6	6	6	6
9 Cocos	7	8	8	8	8	8	8	8	8	8

Time-of-day (UT) = 6

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			23	23	1234	12345	134567	13467	1569	56
1 Darwin			2345	23456	0234567	02345679	02345679	023456789	0356	0359
2 ASprin		3	0134	01345	01345	0134569	1345679	1459	5	567
3 Townsv		2	0125	01256	012456	0124567	01245679	0124569	145679	14567
4 Derby			12	125	012359	01235679	01235679	01235789	356789	356789
5 Jayapu		6	136	123467	0123467	012346789	01234679	1234679	0123469	012346
6 Guam		5	5	357	123457	01234578	01234578	013578	0134578	023457
7 Manila				56	1568	145689	12345689	0145689	34689	23468
8 Songkh					7	79	679	14679	467	7
9 Cocos					4	12458	1234578	1234578	03457	14

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	6	7	8	8	8	8	8	8	8	8
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	7	8	8	8	8	8	8	8	8	8
3 Townsv	8	8	8	8	8	8	8	8	8	8
4 Derby	8	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	8	8	8	8	8	8	8	8	8	8
7 Manila	8	9	9	9	9	9	9	9	9	9
8 Songkh	5	5	5	5	5	5	5	5	5	5
9 Cocos	7	8	8	8	8	8	8	8	8	8

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	23	23	1234	123459	12345679	12345679	1345678	14578	58	5
1 Darwin	234	234567	02345679	023456789	023456789	023456789	02356789	03679	678	89
2 ASprin	034	0134	01345679	013456789	013456789	013456789	1345789	589	56	679
3 Townsv	02	01256	0124567	012456789	012456789	012456789	01245689	145689	467	9
4 Derby	12	1279	01235679	012356789	012356789	012356789	0235789	035679	35679	6789
5 Jayapu	36	123467	012346789	012346789	012346789	012346789	0123479	023479	024	0
6 Guam		57	1234578	012345789	012345789	012345789	013789	13478	12347	24
7 Manila		68	134568	012345689	012345689	012345689	012345689	0145689	134689	2489
8 Songkh		7	7	5679	012345679	012345679	012345679	023679	0179	147

Step 3 Results for: Month = December, Sunspot # = 50, Required SNR = 40 dB-Hz, 40DEC50.OUT

B-3b-2

9 Cocos 4 0124578 012345678 012345678 1234568 134578 478 12347

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	8	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	2	234	123459	12345679	123456789	13456789	13478	158	5	5
1 Darwin	24	02345679	023456789	023456789	023456789	023456789	0235679	0379	9	9
2 ASprin	0	013479	013456789	013456789	013456789	13456789	14589	56	5	
3 Townsv	02	012567	012456789	012456789	012456789	01245689	0145689	14569	4	
4 Derby	2	0126789	012356789	012356789	012356789	01235789	023579	035679	3579	9
5 Jayapu	6	12346789	012346789	012346789	012346789	01234679	123479	02349	024	0
6 Guam		123457	012345789	012345789	012345789	01235789	1378	12347	2	
7 Manila	8	145689	012345689	012345689	012345689	012345689	014568	14689	489	8
8 Songkh		79	0245679	012345679	012345679	012345679	023679	079	79	7
9 Cocos		478	01245678	012345678	012345678	012345678	123458	134578	1478	14

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9

Step 3 Results for: Month = December, Sunspot # = 50, Required SNR = 40 dB-Hz, 40DEC50.OUT

B-3b-3





For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad		23	1234	123459	123457	134679	1356	5		
1 Darwin	4	2345	02345679	023456789	0234567	023679	023679	36		
2 ASprin		0134	013459	013456789	0134567	13456	135	6		
3 Townsv		0125	01245	012456789	01245679	012457	012456	16		
4 Derby	1	129	012356789	012356789	0123569	023579	359	6		
5 Jayapu		136	1234679	012346789	01234679	23467	023467	06		
6 Guam		57	14578	1234579	01234579	01257	01357	12345	3	
7 Manila		68	145689	01234568	0123569	0134569	156			
8 Songkh		79	145679	123459	9					
9 Cocos		148	0124578	01234568	34578	014	14			

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	6	8	8	8	8	8	8	8	8	8
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	8	9	9	9	9	9	9	9	9	9
7 Manila	8	9	9	9	9	9	9	9	9	9
8 Songkh	6	8	8	8	8	8	8	8	8	8
9 Cocos	8	9	9	9	9	9	9	9	9	9

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 12  
 Sunspot Number = 50.00  
 Required SNR (dB-Hz) for comm = 60.0

Time-of-day (UT) = 2

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad				2	23	3				
1 Darwin			4	24	25	35	03			
2 ASprin				0134	0134			5		
3 Townsv				2	02	015	145			
4 Derby			1	12	2		35			
5 Jayapu					16	13	34	246	6	6
6 Guam					5	5	7	57	5	5
7 Manila						8	8	68		
8 Songkh						7	7	7		
9 Cocos							8			

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	2	2	2	2	2	2	2	2	2	2
1 Darwin	2	4	5	5	5	5	5	5	5	5
2 ASprin	4	5	5	5	5	5	5	5	5	5
3 Townsv	3	5	5	5	5	5	5	5	5	5
4 Derby	2	4	4	4	4	4	4	4	4	4
5 Jayapu	3	5	5	5	5	5	5	5	5	5
6 Guam	2	2	2	2	2	2	2	2	2	2
7 Manila	2	2	2	2	2	2	2	2	2	2
8 Songkh	1	1	1	1	1	1	1	1	1	1
9 Cocos	1	1	1	1	1	1	1	1	1	1

Time-of-day (UT) = 6

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad				2	23	3	4	1	5	5
1 Darwin			4	245	245	2345	0235	036		
2 ASprin			0	0134	0134	134	145	5	5	
3 Townsv				2	025	0125	145	1456	456	
4 Derby				12	12	12	0235	35	359	59
5 Jayapu				1	16	136	12347	2346	02346	04
6 Guam				5	5	5	5	57	357	
7 Manila							58	68	6	
8 Songkh								7	4	4
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	2	3	4	5	5	5	5	5	5	5
1 Darwin	4	6	6	6	6	6	6	6	6	6
2 ASprin	4	5	5	5	5	5	5	5	5	5
3 Townsv	4	6	6	6	6	6	6	6	6	6
4 Derby	4	5	6	6	6	6	6	6	6	6
5 Jayapu	5	7	7	7	7	7	7	7	7	7
6 Guam	3	3	3	3	3	3	3	3	3	3
7 Manila	2	3	3	3	3	3	3	3	3	3
8 Songkh	1	1	1	1	1	1	1	1	1	1
9 Cocos	1	1	1	1	1	1	1	1	1	1

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			2	2	3	4				
1 Darwin			24	245	2345	023	0			9
2 ASprin			03	0134	134	5	5			
3 Townsv			2	02	0125	0145	4			
4 Derby			1	12	0129	0239	359	59	9	
5 Jayapu					13	234	024	04		
6 Guam					5		3	37		
7 Manila							568	4689	489	
8 Songkh							7	79	7	

Step 3 Results for: Month = December, Sunspot # = 80, Required SNR = 80 dB-Hz,

00DEC80.OUT

B-3c-2

9 Cocos

4 48 47 1

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	1	2	3	3	3	3	3	3	3	3
1 Darwin	4	5	6	6	6	6	6	6	6	6
2 ASprin	4	5	5	5	5	5	5	5	5	5
3 Townsv	4	5	5	5	5	5	5	5	5	5
4 Derby	4	6	6	6	6	6	6	6	6	6
5 Jayapu	3	5	5	5	5	5	5	5	5	5
6 Guam	2	3	3	3	3	3	3	3	3	3
7 Manila	4	5	5	5	5	5	5	5	5	5
8 Songkh	2	2	2	2	2	2	2	2	2	2
9 Cocos	2	3	4	4	4	4	4	4	4	4

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			2	23	34	134	1	5		
1 Darwin			24	023459	023459	0239	03	9	9	
2 ASprin			03	0134	1345	145	5			
3 Townsv			02	025	01245	0145	145			
4 Derby			2	0129	012359	02359	3579	59		
5 Jayapu				123	12349	234	234	024		
6 Guam					37	37				
7 Manila					8	1468	48	9		
8 Songkh					9	79	79	9		
9 Cocos					4	48	48	148	1	

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	3	4	5	5	5	5	5	5	5	5
1 Darwin	6	6	6	6	6	6	6	6	6	6
2 ASprin	4	5	5	5	5	5	5	5	5	5

Step 3 Results for: Month = December, Sunspot # = 50, Required SNR = 60 dB-Hz, 00DEC60.OUT

B-3c-3

3 Townsv	5	5	5	5	5	5	5	5	5
4 Derby	6	7	7	7	7	7	7	7	7
5 Jayapu	5	6	6	6	6	6	6	6	6
6 Guam	2	2	2	2	2	2	2	2	2
7 Manila	4	5	5	5	5	5	5	5	5
8 Songkh	2	2	2	2	2	2	2	2	2
9 Cocos	3	3	3	3	3	3	3	3	3

Time-of-day (UT) = 18

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			2	34	1					
1 Darwin			24	02345	039	9				
2 ASprin		0	034	14	5					
3 Townsv			02	01245	14					
4 Derby			129	0239	359	9				
5 Jayapu				12347	024					
6 Guam				7						
7 Manila				8	8					
8 Songkh				79	79					
9 Cocos				4	148	14				

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	2	3	4	4	4	4	4	4	4	4
1 Darwin	5	6	6	6	6	6	6	6	6	6
2 ASprin	3	4	5	5	5	5	5	5	5	5
3 Townsv	5	5	5	5	5	5	5	5	5	5
4 Derby	4	5	6	6	6	6	6	6	6	6
5 Jayapu	5	6	6	6	6	6	6	6	6	6
6 Guam	1	1	1	1	1	1	1	1	1	1
7 Manila	1	1	1	1	1	1	1	1	1	1
8 Songkh	2	2	2	2	2	2	2	2	2	2
9 Cocos	3	3	3	3	3	3	3	3	3	3

Time-of-day (UT) = 22

Step 3 Results for: Month = December, Sunspot # = 50, Required SNR = 60 dB-Hz,

60DEC50.OUT

B-3c-4

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			2	23	34	13				
1 Darwin		4	2345	235	035	067	6			
2 ASprin			0134	0134	5	5				
3 Townsv			2	0125	01245	045	6			
4 Derby		12	12	2	0359	35				
5 Jayapu			16	136	12346	23467	6			
6 Guam			5	5	157	157	15			
7 Manilla					6	156				
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	2	3	4	4	4	4	4	4	4	4
1 Darwin	4	7	7	7	7	7	7	7	7	7
2 ASprin	4	5	5	5	5	5	5	5	5	5
3 Townsv	5	6	6	6	6	6	6	6	6	6
4 Derby	4	6	6	6	6	6	6	6	6	6
5 Jayapu	5	6	6	6	6	6	6	6	6	6
6 Guam	3	3	3	3	3	3	3	3	3	3
7 Manilla	3	3	3	3	3	3	3	3	3	3
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	1	1	1	1	1	1	1	1	1	1

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 12  
 Sunspot Number = 50.00  
 Required SNR (dB-Hz) for comm = 80.0

Time-of-day (UT) = 2

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 6

For each Tx node and freq, list the Rx nodes that can be communicated with.

Step 3 Results for: Month = December, Sunspot # = 50, Required SNR = 80 dB-Hz, 80DEC50.OUT



Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										

Step 3 Results for: Month = December, Sunspot # = 50, Required SNR = 80 dB-Hz, 80DEC50.OUT

B-3d-2

# 9 Cocos

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0

3 Townsv	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 18

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 22

Step 3 Results for: Month = December, Sunspot # = 50, Required SNR = 80 dB-Hz,

80DEC80.OUT

B-3d-4

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 6  
 Sunspot Number = 150.00

TX LOCATION = -34.87, 138.50

RX LOCATION = -12.33, 130.83

2.0	34.0	30.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	****	-69.	-7.	24.	38.	45.	58.	60.	62.	63.	63.	SNR
6.0	31.4	27.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	65.	****	-4.	31.	41.	53.	59.	62.	64.	65.	66.	66.	SNR
10.0	22.6	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	66.	41.	55.	60.	63.	64.	66.	66.	51.	22.	-21.	-21.	SNR
14.0	14.9	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	63.	44.	55.	60.	63.	57.	47.	31.	8.	-19.	-46.	-46.	SNR
18.0	14.6	10.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	62.	46.	55.	61.	63.	56.	47.	32.	11.	-14.	-39.	-39.	SNR
22.0	22.0	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	65.	12.	42.	55.	61.	63.	65.	65.	44.	4.	-49.	-49.	SNR

TX LOCATION = -34.87, 138.50

RX LOCATION = -23.67, 135.83

2.0	20.9	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	67.	-61.	18.	41.	54.	62.	66.	70.	36.	-11.	-31.	-31.	SNR
6.0	19.6	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	68.	5.	46.	61.	64.	66.	69.	58.	29.	-11.	-23.	-23.	SNR
10.0	13.3	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	69.	61.	64.	67.	69.	52.	7.	-25.	-25.	-24.	-24.	-24.	SNR
14.0	8.8	7.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	65.	59.	63.	61.	38.	-2.	-20.	-20.	-19.	-19.	-18.	-18.	SNR
18.0	9.4	7.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	65.	58.	64.	67.	51.	23.	-11.	-21.	-20.	-20.	-19.	-19.	SNR
22.0	13.8	12.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	69.	47.	63.	65.	68.	56.	11.	-30.	-30.	-29.	-29.	-29.	SNR

TX LOCATION = -34.87, 138.50

RX LOCATION = -19.33, 146.83

2.0	26.5	23.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	64.	-92.	-9.	27.	42.	53.	59.	62.	65.	57.	30.	30.	SNR
6.0	24.7	21.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	68.	3.	42.	56.	61.	63.	65.	67.	68.	49.	18.	18.	SNR
10.0	16.6	14.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	68.	56.	61.	64.	66.	68.	53.	15.	-37.	-55.	-55.	-55.	SNR
14.0	11.6	9.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	65.	54.	60.	64.	59.	38.	0.	-41.	-48.	-48.	-48.	-48.	SNR
18.0	11.3	8.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	64.	55.	59.	64.	58.	40.	8.	-28.	-49.	-49.	-48.	-48.	SNR
22.0	21.7	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	68.	32.	54.	62.	63.	66.	67.	69.	46.	10.	-37.	-37.	SNR

TX LOCATION = -34.87, 138.50

RX LOCATION = -17.30, 123.63

2.0	33.0	29.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	****	-44.	2.	27.	42.	52.	60.	62.	63.	65.	65.	SNR
6.0	30.6	26.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	66.	****	0.	30.	41.	49.	59.	62.	64.	66.	66.	66.	SNR
10.0	21.6	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

64.	66.	42.	56.	60.	63.	65.	66.	66.	43.	7.	-39.	SNR	
14.0	13.5	11.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	63.	49.	56.	60.	63.	50.	24.	-16.	-58.	-71.	-71.	SNR	
18.0	14.3	10.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	64.	48.	57.	62.	64.	55.	40.	14.	-19.	-53.	-71.	SNR	
22.0	18.0	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	22.	45.	58.	62.	64.	63.	27.	-32.	-81.	-81.	SNR	
TX LOCATION = -34.87, 138.50													
RX LOCATION = -2.47, 140.63													
2.0	38.8	35.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	61.	****	****	-39.	-2.	22.	36.	43.	48.	53.	-24.	SNR	
6.0	35.8	31.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	63.	****	-16.	24.	36.	43.	49.	53.	56.	17.	63.	SNR	
10.0	27.8	23.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	64.	35.	45.	50.	53.	56.	58.	27.	64.	61.	43.	SNR	
14.0	19.8	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	60.	27.	41.	47.	51.	59.	59.	51.	42.	29.	11.	SNR	
18.0	15.8	11.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	57.	29.	41.	48.	57.	57.	47.	34.	16.	-8.	-35.	SNR	
22.0	31.5	28.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	64.	-19.	27.	42.	49.	54.	56.	58.	21.	-42.	62.	SNR	
TX LOCATION = -34.87, 138.50													
RX LOCATION = 13.45, 144.75													
2.0	34.0	30.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	47.	****	****	****	-45.	-10.	13.	30.	38.	44.	46.	SNR	
6.0	31.5	27.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	54.	****	-59.	-2.	19.	34.	43.	49.	53.	54.	55.	SNR	
10.0	25.6	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	58.	14.	35.	44.	49.	53.	57.	58.	57.	28.	-18.	SNR	
14.0	18.6	15.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	54.	17.	35.	44.	51.	54.	52.	22.	-16.	-72.	****	SNR	
18.0	13.7	10.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	47.	19.	36.	45.	48.	28.	-10.	-72.	****	****	****	SNR	
22.0	29.7	26.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	56.	****	-12.	22.	40.	48.	52.	55.	55.	56.	36.	SNR	
TX LOCATION = -34.87, 138.50													
RX LOCATION = 14.67, 121.05													
2.0	37.8	34.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	51.	****	****	-95.	-31.	-7.	12.	28.	41.	45.	49.	SNR	
6.0	34.5	30.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
36.	51.	****	****	-43.	-11.	12.	27.	37.	43.	48.	50.	SNR	
10.0	27.2	23.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	55.	-8.	25.	38.	44.	48.	52.	54.	56.	49.	9.	SNR	
14.0	18.5	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	51.	11.	31.	41.	47.	50.	48.	18.	-22.	-81.	****	SNR	
18.0	15.3	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
36.	46.	9.	31.	41.	46.	44.	15.	-29.	-91.	****	****	SNR	
22.0	21.9	19.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	53.	-61.	5.	28.	42.	49.	51.	53.	12.	-53.	****	SNR	
TX LOCATION = -34.87, 138.50													
RX LOCATION = 17.22, 100.62													
2.0	41.7	37.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
32.	54.	****	****	-91.	-35.	-8.	14.	30.	36.	41.	43.	SNR	
6.0	38.0	33.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	31.	48.	****	****	****	-60.	-21.	16.	18.	28.	34.	46.	SNR
10.0	28.5	24.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	36.	54.	-56.	6.	25.	34.	39.	43.	45.	53.	51.	21.	SNR
14.0	18.1	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	33.	49.	11.	27.	36.	47.	49.	37.	6.	-43.	****	****	SNR
18.0	16.5	12.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	35.	49.	12.	28.	42.	48.	47.	24.	-10.	-64.	****	****	SNR
22.0	18.0	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	31.	49.	-55.	3.	29.	42.	48.	31.	-27.	****	****	****	SNR
TX LOCATION = -34.87, 138.50													
RX LOCATION = -12.20, 96.90													
2.0	33.6	30.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	55.	****	-88.	-15.	17.	26.	38.	49.	52.	53.	55.	SNR
6.0	31.3	27.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	48.	51.	****	****	-40.	2.	24.	35.	43.	48.	50.	52.	SNR
10.0	23.1	19.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	49.	56.	3.	35.	45.	48.	51.	54.	56.	33.	-14.	-93.	SNR
14.0	13.2	10.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	45.	52.	35.	45.	50.	52.	19.	-40.	****	****	****	****	SNR
18.0	12.5	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	46.	53.	31.	46.	52.	50.	21.	-17.	-73.	****	****	****	SNR
22.0	10.2	7.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	41.	41.	13.	38.	44.	23.	-17.	-79.	****	****	****	****	SNR
TX LOCATION = -12.33, 130.83													
RX LOCATION = -34.87, 138.50													
2.0	34.0	30.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	64.	****	-69.	-7.	24.	38.	45.	58.	60.	62.	64.	SNR
6.0	31.4	28.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	65.	****	-5.	30.	41.	53.	58.	61.	63.	65.	66.	SNR
10.0	22.6	18.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	64.	66.	39.	53.	58.	61.	63.	65.	66.	54.	40.	17.	SNR
14.0	14.9	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	62.	42.	53.	59.	62.	56.	47.	31.	8.	-19.	-46.	SNR
18.0	14.6	10.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	61.	43.	54.	60.	62.	56.	47.	32.	11.	-14.	-39.	SNR
22.0	22.0	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	62.	65.	14.	43.	55.	61.	63.	65.	65.	44.	4.	-49.	SNR
TX LOCATION = -12.33, 130.83													
RX LOCATION = -23.67, 135.83													
2.0	23.6	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	69.	66.	-98.	-6.	29.	51.	54.	62.	66.	71.	44.	14.	SNR
6.0	21.7	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	71.	68.	-36.	26.	47.	60.	63.	67.	70.	56.	35.	7.	SNR
10.0	17.3	14.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	70.	70.	56.	62.	66.	68.	70.	63.	51.	30.	3.	-23.	SNR
14.0	11.9	9.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	67.	57.	63.	66.	63.	55.	40.	18.	-5.	-26.	-26.	SNR
18.0	9.8	6.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	65.	58.	64.	67.	58.	42.	18.	-7.	-25.	-25.	-25.	SNR
22.0	15.5	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	70.	69.	40.	60.	64.	67.	70.	43.	-4.	-34.	-33.	-33.	SNR
TX LOCATION = -12.33, 130.83													
RX LOCATION = -19.33, 146.83													
2.0	28.0	24.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

67.	64.	****	-29.	16.	36.	47.	54.	60.	63.	66.	51.	SNR	
6.0	25.8	23.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	67.	-32.	25.	45.	57.	61.	63.	66.	68.	58.	43.	SNR	
10.0	21.8	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	69.	53.	56.	63.	66.	68.	69.	69.	56.	42.	21.	SNR	
14.0	15.8	12.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	67.	50.	60.	65.	67.	67.	57.	46.	30.	11.	-10.	SNR	
18.0	11.5	8.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	52.	60.	65.	60.	50.	31.	6.	-21.	-46.	-48.	SNR	
22.0	22.9	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	68.	24.	51.	60.	62.	65.	67.	68.	56.	30.	-11.	SNR	
TX LOCATION = -12.33, 130.83													
RX LOCATION = -17.30, 123.63													
2.0	20.0	18.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
72.	68.	-70.	15.	51.	55.	64.	68.	62.	45.	17.	-13.	SNR	
6.0	18.4	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	67.	-48.	26.	58.	62.	65.	69.	57.	38.	12.	-6.	SNR	
10.0	15.5	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	71.	60.	65.	69.	70.	71.	60.	43.	20.	-3.	-7.	SNR	
14.0	10.9	9.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	69.	61.	66.	69.	61.	36.	0.	-7.	-6.	-6.	-5.	SNR	
18.0	8.1	6.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	67.	62.	67.	62.	40.	5.	-6.	-6.	-5.	-5.	-4.	SNR	
22.0	10.5	9.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	68.	50.	64.	68.	55.	10.	-9.	-9.	-8.	-8.	-7.	SNR	
TX LOCATION = -12.33, 130.83													
RX LOCATION = -2.47, 140.63													
2.0	25.3	22.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	65.	****	-36.	23.	40.	55.	59.	63.	66.	56.	38.	SNR	
6.0	23.4	20.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	67.	-60.	13.	43.	57.	60.	63.	67.	62.	50.	31.	SNR	
10.0	24.4	20.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	70.	51.	59.	64.	66.	68.	69.	71.	71.	59.	49.	SNR	
14.0	20.2	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	70.	47.	58.	63.	67.	68.	70.	62.	50.	30.	4.	SNR	
18.0	12.2	9.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	64.	49.	60.	64.	67.	52.	28.	-4.	-34.	-34.	-34.	SNR	
22.0	19.4	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	68.	20.	52.	62.	65.	67.	69.	56.	32.	-5.	-41.	SNR	
TX LOCATION = -12.33, 130.83													
RX LOCATION = 13.45, 144.75													
2.0	33.1	29.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	59.	****	****	-22.	16.	32.	40.	52.	53.	56.	59.	SNR	
6.0	29.6	25.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	59.	****	-24.	19.	35.	47.	52.	55.	58.	60.	54.	SNR	
10.0	32.5	25.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	65.	24.	42.	51.	57.	60.	64.	65.	65.	65.	64.	SNR	
14.0	32.3	25.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	66.	18.	40.	51.	59.	65.	66.	66.	66.	66.	64.	SNR	
18.0	22.5	17.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	22.	43.	53.	59.	62.	62.	61.	52.	40.	23.	SNR	
22.0	30.5	27.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	64.	-62.	17.	42.	52.	59.	62.	62.	63.	64.	62.	SNR	
TX LOCATION = -12.33, 130.83													



RX LOCATION = 14.67, 121.05

2.0	34.8	31.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	61.	****	****	-10.	23.	37.	46.	53.	55.	58.	60.	60.	SNR
6.0	29.5	26.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	59.	****	****	-1.	27.	38.	47.	50.	55.	59.	53.	53.	SNR
10.0	31.4	26.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	65.	8.	38.	48.	54.	57.	60.	62.	63.	65.	64.	64.	SNR
14.0	31.8	26.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	66.	16.	39.	50.	57.	62.	64.	65.	65.	66.	65.	65.	SNR
18.0	25.4	20.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	64.	16.	37.	50.	58.	63.	63.	64.	63.	52.	39.	39.	SNR
22.0	23.5	20.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	63.	-28.	28.	46.	55.	60.	61.	63.	52.	30.	-8.	-8.	SNR

TX LOCATION = -12.33, 130.83

RX LOCATION = 17.22, 100.62

2.0	39.1	33.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	-18.	****	****	-37.	-2.	17.	33.	41.	45.	49.	25.	25.	SNR
6.0	31.7	28.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	51.	****	****	-69.	-16.	12.	23.	34.	11.	50.	52.	52.	SNR
10.0	32.0	27.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	22.	-42.	17.	32.	39.	44.	47.	51.	38.	24.	59.	59.	SNR
14.0	33.0	25.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	39.	17.	30.	41.	48.	52.	55.	56.	53.	33.	14.	14.	SNR
18.0	22.5	17.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	57.	9.	30.	43.	52.	56.	57.	55.	34.	14.	-16.	-16.	SNR
22.0	16.2	14.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	51.	-34.	17.	35.	46.	52.	11.	-78.	****	****	****	****	SNR

TX LOCATION = -12.33, 130.83

RX LOCATION = -12.20, 96.90

2.0	47.2	42.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	44.	****	-65.	-6.	21.	37.	45.	53.	56.	56.	58.	58.	SNR
6.0	41.6	37.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	61.	****	****	-31.	7.	28.	40.	50.	54.	54.	37.	37.	SNR
10.0	35.3	29.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	64.	8.	39.	50.	54.	57.	59.	60.	61.	37.	64.	64.	SNR
14.0	24.9	20.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	63.	34.	53.	59.	61.	60.	45.	63.	60.	46.	28.	28.	SNR
18.0	17.0	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	39.	41.	54.	58.	53.	60.	50.	34.	8.	-26.	-62.	-62.	SNR
22.0	14.0	10.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	55.	20.	44.	50.	56.	47.	25.	-11.	-54.	-97.	****	****	SNR

TX LOCATION = -23.67, 135.83

RX LOCATION = -34.87, 138.50

2.0	20.9	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	67.	-61.	18.	41.	53.	62.	66.	70.	36.	-11.	-31.	-31.	SNR
6.0	19.6	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	68.	5.	46.	61.	63.	65.	68.	58.	29.	-11.	-23.	-23.	SNR
10.0	13.3	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	67.	60.	63.	65.	67.	51.	7.	-25.	-25.	-24.	-24.	-24.	SNR
14.0	8.8	7.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	64.	57.	62.	60.	38.	-2.	-20.	-20.	-19.	-19.	-18.	-18.	SNR
18.0	9.4	7.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	64.	57.	63.	66.	51.	22.	-11.	-21.	-20.	-20.	-19.	-19.	SNR
22.0	13.8	12.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	69.	68.	47.	63.	65.	68.	56.	11.	-30.	-30.	-29.	-29.	SNR
TX LOCATION	= -23.67, 135.83												
RX LOCATION	= -12.33, 130.83												
2.0	23.6	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	66.	-98.	-6.	29.	51.	54.	62.	66.	70.	44.	14.		SNR
6.0	21.7	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
71.	68.	-36.	26.	47.	60.	62.	67.	70.	56.	35.	7.		SNR
10.0	17.3	14.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	70.	56.	62.	66.	68.	70.	63.	51.	30.	3.	-23.		SNR
14.0	11.9	9.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	67.	57.	63.	66.	63.	55.	40.	18.	-5.	-26.	-26.		SNR
18.0	9.8	6.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	58.	64.	67.	58.	42.	18.	-7.	-25.	-25.	-25.		SNR
22.0	15.5	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	69.	38.	59.	63.	67.	69.	43.	-4.	-34.	-33.	-33.		SNR
TX LOCATION	= -23.67, 135.83												
RX LOCATION	= -19.33, 146.83												
2.0	20.4	18.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	65.	-94.	-3.	33.	52.	60.	65.	61.	41.	7.	-28.		SNR
6.0	19.2	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
71.	69.	-1.	44.	61.	65.	67.	70.	58.	36.	5.	-21.		SNR
10.0	14.2	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	70.	61.	65.	68.	70.	63.	47.	19.	-11.	-23.	-22.		SNR
14.0	10.0	7.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	67.	59.	64.	68.	59.	43.	19.	-6.	-19.	-18.	-18.		SNR
18.0	8.7	6.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	64.	59.	64.	63.	52.	31.	4.	-19.	-18.	-18.	-17.		SNR
22.0	17.5	15.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
71.	70.	36.	60.	65.	67.	70.	63.	37.	-6.	-30.	-29.		SNR
TX LOCATION	= -23.67, 135.83												
RX LOCATION	= -17.30, 123.63												
2.0	24.9	22.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	67.	-82.	1.	33.	47.	56.	62.	66.	69.	53.	29.		SNR
6.0	22.7	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	68.	-43.	20.	44.	59.	61.	65.	68.	59.	43.	17.		SNR
10.0	17.3	14.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	69.	56.	62.	65.	67.	69.	62.	49.	27.	-1.	-28.		SNR
14.0	11.3	8.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	57.	62.	66.	61.	50.	31.	6.	-20.	-31.	-30.		SNR
18.0	10.3	7.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	57.	63.	67.	59.	45.	23.	-2.	-27.	-30.	-29.		SNR
22.0	13.9	12.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	67.	42.	58.	63.	67.	54.	7.	-37.	-37.	-36.	-36.		SNR
TX LOCATION	= -23.67, 135.83												
RX LOCATION	= -2.47, 140.63												
2.0	33.1	29.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	63.	****	****	-19.	16.	33.	43.	52.	58.	61.	63.		SNR
6.0	30.6	27.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	****	-7.	29.	40.	51.	57.	61.	63.	65.	67.		SNR
10.0	27.7	23.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	68.	37.	47.	55.	60.	63.	65.	67.	68.	67.	54.		SNR
14.0	20.8	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	66.	36.	51.	57.	62.	64.	66.	59.	45.	21.	-11.		SNR
18.0	13.6	10.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

62.	60.	38.	52.	58.	62.	52.	32.	1.	-36.	-71.	-71.	SNR	
22.0	26.9	23.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	67.	-15.	34.	46.	58.	62.	64.	66.	67.	67.	44.	SNR	
TX LOCATION = -23.67, 135.83													
RX LOCATION = 13.45, 144.75													
2.0	41.4	37.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	40.	****	****	-71.	-9.	12.	30.	39.	42.	48.	53.	SNR	
6.0	37.4	33.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	-21.	****	-41.	8.	29.	40.	47.	52.	54.	52.	19.	SNR	
10.0	40.5	34.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	26.	15.	34.	44.	50.	56.	60.	62.	61.	61.	55.	SNR	
14.0	34.3	28.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	26.	18.	38.	48.	55.	60.	61.	61.	60.	37.	11.	SNR	
18.0	19.5	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	40.	21.	39.	48.	52.	39.	11.	47.	32.	9.	-21.	SNR	
22.0	26.5	23.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	58.	****	2.	32.	43.	51.	55.	56.	58.	40.	11.	SNR	
TX LOCATION = -23.67, 135.83													
RX LOCATION = 14.67, 121.05													
2.0	34.0	30.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	51.	****	****	-59.	-21.	8.	28.	39.	45.	47.	51.	SNR	
6.0	37.9	33.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	-18.	****	****	-29.	9.	27.	37.	44.	48.	52.	23.	SNR	
10.0	31.2	25.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	60.	-2.	24.	39.	45.	50.	55.	57.	59.	60.	59.	SNR	
14.0	26.0	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	59.	11.	35.	45.	52.	56.	59.	59.	58.	43.	33.	SNR	
18.0	16.6	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	50.	13.	34.	44.	50.	52.	37.	19.	-7.	-42.	-83.	SNR	
22.0	19.8	17.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	55.	-64.	13.	35.	47.	53.	55.	28.	-29.	****	****	SNR	
TX LOCATION = -23.67, 135.83													
RX LOCATION = 17.22, 100.62													
2.0	34.6	31.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	51.	****	****	-80.	-16.	13.	25.	39.	44.	48.	50.	SNR	
6.0	27.2	24.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
32.	39.	****	****	-87.	-27.	3.	23.	32.	39.	43.	15.	SNR	
10.0	34.2	28.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	57.	-39.	4.	27.	38.	44.	49.	53.	56.	57.	57.	SNR	
14.0	26.0	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	56.	0.	33.	43.	49.	53.	56.	56.	53.	37.	25.	SNR	
18.0	17.2	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	49.	8.	33.	43.	49.	49.	34.	16.	-11.	-47.	-90.	SNR	
22.0	18.1	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	51.	-40.	11.	31.	44.	49.	42.	-18.	****	****	****	SNR	
TX LOCATION = -23.67, 135.83													
RX LOCATION = -12.20, 96.90													
2.0	34.4	30.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	56.	****	-60.	-13.	18.	34.	42.	51.	53.	56.	56.	SNR	
6.0	41.3	36.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	-27.	****	****	-29.	6.	27.	38.	45.	48.	52.	54.	SNR	
10.0	23.8	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	57.	8.	38.	48.	52.	54.	57.	58.	44.	24.	-7.	SNR	
14.0	19.6	15.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	54.	41.	37.	50.	54.	55.	42.	23.	49.	39.	24.	5.	SNR
18.0	16.1	12.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	54.	40.	37.	51.	55.	51.	20.	45.	31.	9.	-18.	-49.	SNR
22.0	14.0	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	52.	47.	17.	40.	47.	29.	47.	34.	13.	-15.	-47.	-79.	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = -34.87, 138.50													
2.0	26.5	23.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	64.	-92.	-9.	27.	42.	52.	59.	62.	65.	57.	30.	SNR
6.0	24.7	21.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	69.	67.	3.	42.	56.	60.	61.	64.	67.	68.	49.	18.	SNR
10.0	16.6	14.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	66.	55.	59.	62.	64.	67.	52.	14.	-37.	-55.	-55.	SNR
14.0	11.6	9.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	64.	64.	52.	58.	63.	58.	38.	0.	-41.	-48.	-48.	-48.	SNR
18.0	11.3	8.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	64.	63.	54.	59.	64.	58.	40.	8.	-28.	-49.	-49.	-48.	SNR
22.0	21.7	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	68.	31.	53.	61.	63.	66.	67.	69.	46.	10.	-37.	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = -12.33, 130.83													
2.0	28.0	24.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	64.	****	-29.	16.	36.	47.	54.	60.	63.	66.	51.	SNR
6.0	25.8	23.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	69.	67.	-32.	25.	45.	56.	60.	63.	66.	68.	58.	43.	SNR
10.0	21.8	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	69.	53.	56.	62.	66.	67.	69.	69.	56.	42.	21.	SNR
14.0	15.8	12.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	67.	50.	59.	64.	67.	67.	57.	46.	30.	11.	-10.	SNR
18.0	11.5	8.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	64.	52.	60.	65.	60.	50.	31.	6.	-21.	-46.	-48.	SNR
22.0	22.9	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	69.	68.	22.	49.	59.	62.	65.	67.	68.	56.	30.	-11.	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = -23.67, 135.83													
2.0	20.4	18.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	69.	65.	-94.	-3.	33.	52.	60.	65.	61.	41.	7.	-28.	SNR
6.0	19.2	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	71.	68.	-1.	44.	61.	64.	66.	69.	58.	36.	5.	-21.	SNR
10.0	14.2	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	69.	69.	60.	65.	67.	69.	62.	46.	19.	-11.	-23.	-22.	SNR
14.0	10.0	7.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	63.	66.	59.	64.	67.	58.	43.	19.	-6.	-19.	-18.	-18.	SNR
18.0	8.7	6.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	63.	64.	59.	64.	63.	52.	31.	4.	-19.	-18.	-18.	-17.	SNR
22.0	17.5	15.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	71.	70.	36.	59.	65.	67.	70.	63.	37.	-6.	-30.	-29.	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = -17.30, 123.63													
2.0	33.5	29.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	64.	****	-85.	-13.	21.	36.	44.	51.	59.	62.	64.	SNR
6.0	30.8	27.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	65.	****	-10.	28.	40.	52.	58.	61.	64.	65.	66.	SNR
10.0	24.1	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

64.	67.	39.	51.	59.	63.	65.	66.	67.	65.	50.	34.	SNR
14.0	16.6	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
63.	65.	46.	56.	61.	64.	65.	55.	45.	30.	10.	-14.	SNR
18.0	13.9	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
62.	62.	45.	56.	62.	63.	55.	44.	26.	3.	-23.	-49.	SNR
22.0	23.5	20.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
66.	66.	2.	37.	53.	60.	64.	65.	66.	56.	31.	-13.	SNR
TX LOCATION = -19.33, 146.83												
RX LOCATION = -2.47, 140.63												
2.0	28.5	25.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
66.	63.	****	-48.	7.	33.	45.	56.	58.	62.	64.	54.	SNR
6.0	27.0	24.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
69.	67.	-90.	28.	48.	56.	59.	61.	65.	67.	69.	51.	SNR
10.0	26.0	21.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	69.	50.	56.	62.	65.	66.	67.	69.	69.	60.	51.	SNR
14.0	20.4	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
67.	68.	43.	56.	61.	65.	66.	68.	60.	46.	23.	-7.	SNR
18.0	11.7	8.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
64.	61.	48.	57.	61.	59.	43.	14.	-27.	-53.	-53.	-53.	SNR
22.0	27.7	24.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
69.	68.	5.	42.	54.	62.	65.	65.	67.	68.	69.	52.	SNR
TX LOCATION = -19.33, 146.83												
RX LOCATION = 13.45, 144.75												
2.0	36.8	33.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
52.	59.	****	****	-44.	2.	26.	37.	43.	52.	54.	56.	SNR
6.0	34.7	30.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
55.	62.	****	-10.	25.	40.	48.	56.	59.	61.	61.	62.	SNR
10.0	38.0	31.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
57.	65.	27.	41.	50.	55.	60.	62.	62.	66.	65.	65.	SNR
14.0	34.2	28.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
56.	65.	17.	40.	51.	58.	62.	63.	63.	59.	65.	65.	SNR
18.0	18.9	14.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
53.	37.	25.	41.	49.	52.	59.	57.	46.	29.	4.	-27.	SNR
22.0	37.5	33.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
55.	64.	-92.	0.	32.	45.	53.	57.	57.	60.	41.	11.	SNR
TX LOCATION = -19.33, 146.83												
RX LOCATION = 14.67, 121.05												
2.0	29.1	26.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
52.	47.	****	****	-62.	-4.	17.	33.	41.	44.	49.	34.	SNR
6.0	34.8	31.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
53.	-13.	****	****	-17.	18.	33.	41.	44.	51.	30.	0.	SNR
10.0	37.0	31.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
56.	31.	-4.	33.	44.	49.	54.	56.	58.	59.	58.	37.	SNR
14.0	28.0	23.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
55.	60.	7.	35.	45.	53.	58.	60.	61.	61.	59.	35.	SNR
18.0	17.2	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
50.	52.	5.	32.	43.	50.	53.	38.	12.	-29.	-85.	****	SNR
22.0	23.0	20.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
53.	56.	****	0.	29.	44.	52.	55.	56.	33.	-10.	-80.	SNR
TX LOCATION = -19.33, 146.83												
RX LOCATION = 17.22, 100.62												
2.0	32.3	29.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
46.	46.	****	****	-95.	-26.	6.	20.	34.	41.	44.	47.	SNR
6.0	26.1	23.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ

	31.	38.	****	****	-81.	-23.	5.	24.	32.	40.	27.	2.	SNR
10.0	26.7	22.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	47.	52.	-55.	19.	33.	39.	44.	48.	51.	53.	39.	23.	SNR
14.0	29.6	24.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	57.	-4.	29.	41.	48.	53.	56.	58.	57.	56.	38.	SNR
18.0	18.5	14.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	37.	52.	5.	28.	42.	50.	52.	45.	18.	-18.	-69.	****	SNR
22.0	21.3	19.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	34.	51.	****	-3.	20.	39.	47.	50.	46.	-3.	-82.	****	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = -12.20, 96.90													
2.0	37.4	33.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	52.	53.	****	****	-57.	-9.	11.	23.	36.	47.	50.	52.	SNR
6.0	33.8	30.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	49.	51.	****	****	-51.	-10.	15.	29.	39.	45.	48.	50.	SNR
10.0	26.5	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	46.	57.	-4.	25.	41.	47.	51.	54.	56.	57.	38.	18.	SNR
14.0	17.6	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	39.	55.	24.	44.	51.	54.	54.	38.	21.	-6.	-42.	-87.	SNR
18.0	14.1	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	39.	52.	26.	45.	52.	52.	34.	11.	-25.	-72.	****	****	SNR
22.0	12.3	11.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	44.	47.	-17.	25.	43.	47.	-60.	****	****	****	****	****	SNR
TX LOCATION = -17.30, 123.63													
RX LOCATION = -34.87, 138.50													
2.0	33.0	29.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	65.	****	-44.	2.	27.	41.	51.	60.	62.	63.	65.	SNR
6.0	30.6	26.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	66.	****	-1.	29.	41.	49.	59.	62.	64.	66.	66.	SNR
10.0	21.6	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	64.	66.	40.	54.	59.	62.	64.	66.	66.	43.	7.	-39.	SNR
14.0	13.5	10.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	61.	47.	55.	59.	62.	53.	39.	17.	-11.	-40.	-68.	SNR
18.0	14.3	10.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	58.	62.	47.	55.	61.	63.	56.	46.	31.	9.	-15.	-41.	SNR
22.0	18.0	16.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	65.	24.	47.	58.	61.	64.	63.	27.	-32.	-81.	-81.	SNR
TX LOCATION = -17.30, 123.63													
RX LOCATION = -12.33, 130.83													
2.0	20.0	18.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	72.	68.	-70.	15.	51.	55.	63.	68.	62.	45.	17.	-13.	SNR
6.0	18.4	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	67.	-48.	26.	58.	62.	66.	70.	57.	38.	12.	-6.	SNR
10.0	15.5	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	72.	60.	66.	69.	71.	72.	60.	43.	20.	-3.	-7.	SNR
14.0	10.9	9.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	69.	61.	66.	69.	62.	36.	0.	-7.	-6.	-6.	-5.	SNR
18.0	8.1	6.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	67.	62.	67.	62.	40.	5.	-6.	-6.	-5.	-5.	-4.	SNR
22.0	10.5	9.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	68.	51.	65.	68.	55.	10.	-9.	-9.	-8.	-8.	-7.	SNR
TX LOCATION = -17.30, 123.63													
RX LOCATION = -23.67, 135.83													
2.0	24.9	22.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

70.	67.	-82.	1.	33.	47.	56.	62.	66.	69.	53.	29.	SNR	
6.0	22.7	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	68.	-43.	20.	44.	59.	62.	65.	68.	59.	43.	17.	SNR	
10.0	17.3	14.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	69.	56.	62.	66.	68.	70.	62.	49.	27.	-1.	-28.	SNR	
14.0	11.3	8.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	66.	57.	62.	66.	61.	50.	31.	6.	-20.	-31.	-30.	SNR	
18.0	10.3	7.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	57.	63.	66.	59.	45.	23.	-2.	-27.	-30.	-29.	SNR	
22.0	13.9	12.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	67.	44.	61.	64.	67.	54.	7.	-37.	-37.	-36.	-36.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -19.33, 146.83													
2.0	33.5	29.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	****	-85.	-13.	21.	36.	44.	51.	59.	62.	64.	SNR	
6.0	30.8	27.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	****	-10.	28.	41.	54.	59.	61.	64.	65.	66.	SNR	
10.0	24.1	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	67.	39.	52.	60.	64.	66.	67.	67.	65.	50.	34.	SNR	
14.0	16.6	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	65.	45.	57.	62.	65.	65.	55.	45.	30.	10.	-14.	SNR	
18.0	13.9	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	62.	45.	56.	61.	63.	55.	44.	26.	3.	-23.	-49.	SNR	
22.0	23.5	20.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	66.	5.	41.	54.	60.	63.	65.	66.	56.	31.	-13.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -2.47, 140.63													
2.0	35.5	31.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	****	****	-13.	19.	36.	46.	51.	58.	60.	63.	SNR	
6.0	32.3	28.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	****	-36.	14.	37.	45.	56.	60.	62.	64.	66.	SNR	
10.0	31.1	26.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	68.	33.	46.	55.	60.	63.	66.	66.	68.	68.	67.	SNR	
14.0	24.2	20.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	67.	36.	51.	58.	62.	65.	66.	67.	65.	50.	32.	SNR	
18.0	15.5	11.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	62.	38.	52.	59.	63.	63.	48.	27.	-3.	-37.	-69.	SNR	
22.0	23.2	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	66.	-5.	39.	52.	59.	63.	64.	66.	55.	34.	-1.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = 13.45, 144.75													
2.0	39.4	35.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	59.	****	****	-57.	-1.	25.	37.	44.	51.	51.	21.	SNR	
6.0	35.3	31.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	60.	****	-47.	0.	23.	38.	46.	50.	54.	29.	59.	SNR	
10.0	38.3	32.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	25.	16.	38.	48.	53.	58.	61.	62.	62.	60.	38.	SNR	
14.0	36.3	30.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	24.	12.	37.	48.	57.	62.	63.	62.	62.	45.	26.	SNR	
18.0	23.7	18.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	43.	21.	41.	50.	56.	57.	43.	21.	52.	43.	29.	SNR	
22.0	30.2	26.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	-21.	-87.	15.	38.	48.	54.	55.	58.	27.	-24.	55.	SNR	
TX LOCATION = -17.30, 123.63													

RX LOCATION = 14.67, 121.05

2.0	40.7	36.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	62.	****	****	-23.	15.	34.	44.	50.	56.	59.	59.	59.	SNR
6.0	34.5	30.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	59.	****	****	-13.	18.	33.	41.	49.	52.	56.	59.	59.	SNR
10.0	36.4	30.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	0.	34.	45.	51.	56.	59.	62.	64.	64.	65.	65.	SNR
14.0	35.1	29.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	14.	39.	49.	56.	60.	62.	65.	66.	65.	65.	65.	SNR
18.0	25.7	19.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	40.	12.	36.	48.	55.	58.	56.	63.	61.	52.	42.	42.	SNR
22.0	21.3	19.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	61.	-17.	29.	45.	51.	52.	60.	58.	33.	-7.	-59.	-59.	SNR

TX LOCATION = -17.30, 123.63

RX LOCATION = 17.22, 100.62

2.0	31.5	28.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	52.	****	****	-89.	-27.	5.	20.	38.	44.	49.	51.	53.	SNR
6.0	34.7	31.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	55.	****	****	-74.	-18.	11.	24.	34.	41.	14.	-28.	-28.	SNR
10.0	35.3	31.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	-9.	-49.	17.	32.	40.	45.	49.	52.	55.	35.	9.	9.	SNR
14.0	28.8	23.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	59.	8.	32.	43.	49.	54.	57.	59.	59.	58.	38.	38.	SNR
18.0	21.2	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	57.	11.	33.	45.	53.	56.	57.	50.	26.	45.	-37.	-37.	SNR
22.0	13.5	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	47.	-19.	23.	38.	47.	11.	-40.	****	****	****	****	****	SNR

TX LOCATION = -17.30, 123.63

RX LOCATION = -12.20, 96.90

2.0	42.6	37.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	66.	****	****	-35.	17.	37.	47.	57.	59.	63.	65.	64.	SNR
6.0	37.3	33.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	****	****	-8.	22.	35.	45.	54.	59.	58.	61.	61.	SNR
10.0	30.9	27.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	66.	14.	46.	54.	58.	61.	63.	64.	65.	66.	66.	66.	SNR
14.0	20.9	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	42.	56.	62.	64.	64.	65.	56.	43.	21.	-10.	-10.	SNR
18.0	14.7	11.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	63.	47.	58.	62.	63.	55.	44.	26.	0.	-29.	-58.	-58.	SNR
22.0	11.1	7.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	54.	37.	51.	56.	51.	36.	9.	-25.	-60.	-86.	-85.	-85.	SNR

TX LOCATION = -2.47, 140.63

RX LOCATION = -34.87, 138.50

2.0	38.8	34.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	61.	****	****	-38.	-1.	23.	37.	43.	48.	52.	-2.	-2.	SNR
6.0	35.8	31.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	63.	****	****	-17.	22.	36.	43.	50.	54.	56.	24.	63.	SNR
10.0	27.8	23.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	64.	36.	41.	50.	54.	57.	58.	35.	63.	60.	48.	48.	SNR
14.0	19.8	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	61.	27.	44.	51.	54.	61.	60.	48.	26.	-9.	-51.	-51.	SNR
18.0	15.8	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	58.	30.	44.	50.	58.	57.	43.	21.	-11.	-49.	-86.	-86.	SNR
22.0	31.5	28.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ



	54.	64.	-18.	27.	42.	49.	55.	56.	58.	21.	-42.	62.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = -12.33, 130.83													
2.0	25.3	22.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	65.	****	-36.	24.	41.	56.	59.	63.	66.	56.	38.	38.	SNR
6.0	23.4	20.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	68.	-60.	13.	45.	59.	62.	64.	68.	62.	50.	31.	31.	SNR
10.0	24.4	20.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
71.	71.	55.	63.	68.	70.	71.	70.	71.	71.	59.	19.	19.	SNR
14.0	20.2	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	71.	55.	64.	69.	71.	70.	71.	63.	50.	30.	4.	4.	SNR
18.0	12.2	9.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	68.	55.	65.	68.	69.	52.	28.	-4.	-34.	-34.	-34.	-34.	SNR
22.0	19.4	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	69.	19.	52.	63.	66.	67.	69.	56.	32.	-5.	-41.	-41.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = -23.67, 135.83													
2.0	33.1	29.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	63.	****	****	-19.	17.	35.	44.	52.	58.	61.	63.	63.	SNR
6.0	30.6	27.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	****	-6.	30.	42.	54.	59.	61.	64.	65.	67.	67.	SNR
10.0	27.7	23.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	68.	40.	50.	59.	63.	66.	67.	67.	68.	67.	54.	54.	SNR
14.0	20.8	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	67.	43.	55.	62.	66.	66.	67.	59.	45.	21.	-11.	-11.	SNR
18.0	13.6	10.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	63.	43.	56.	61.	64.	53.	32.	1.	-36.	-71.	-71.	-71.	SNR
22.0	26.9	23.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	67.	-15.	34.	47.	59.	63.	64.	66.	67.	67.	44.	44.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = -19.33, 146.83													
2.0	28.5	25.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	63.	****	-48.	7.	34.	46.	57.	58.	62.	64.	54.	54.	SNR
6.0	27.0	24.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	67.	-90.	28.	49.	59.	62.	63.	66.	67.	69.	51.	51.	SNR
10.0	26.0	21.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	69.	53.	59.	66.	69.	70.	68.	69.	69.	60.	51.	51.	SNR
14.0	20.4	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	69.	52.	62.	67.	69.	68.	69.	60.	46.	23.	-7.	-7.	SNR
18.0	11.7	8.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	55.	62.	65.	60.	44.	14.	-27.	-53.	-53.	-53.	-53.	SNR
22.0	27.7	24.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	68.	6.	44.	56.	63.	65.	65.	67.	68.	69.	52.	52.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = -17.30, 123.63													
2.0	35.5	31.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	****	****	-13.	21.	37.	47.	52.	58.	61.	63.	63.	SNR
6.0	32.3	28.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	****	-36.	16.	38.	46.	57.	61.	62.	64.	66.	66.	SNR
10.0	31.1	26.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	68.	37.	51.	59.	63.	66.	67.	67.	68.	68.	67.	67.	SNR
14.0	24.2	20.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	67.	44.	56.	63.	66.	67.	67.	67.	65.	50.	32.	32.	SNR
18.0	15.5	11.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

62.	64.	44.	57.	63.	64.	63.	48.	27.	-3.	-37.	-69.	SNR	
22.0	23.2	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	66.	-7.	37.	52.	60.	63.	64.	66.	55.	34.	-1.	SNR	
TX LOCATION = -2.47, 140.63													
RX LOCATION = 13.45, 144.75													
2.0	22.8	19.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	69.	****	-71.	13.	44.	51.	64.	63.	55.	58.	60.	SNR	
6.0	18.8	15.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
72.	67.	-48.	20.	50.	60.	65.	70.	65.	62.	61.	57.	SNR	
10.0	19.2	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	45.	54.	59.	62.	64.	66.	59.	50.	35.	17.	SNR	
14.0	19.9	15.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	66.	38.	51.	58.	63.	66.	68.	60.	52.	39.	22.	SNR	
18.0	16.1	12.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	44.	53.	59.	63.	66.	54.	34.	4.	-29.	-52.	SNR	
22.0	22.8	19.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
73.	70.	-10.	36.	55.	64.	65.	68.	72.	62.	50.	36.	SNR	
TX LOCATION = -2.47, 140.63													
RX LOCATION = 14.67, 121.05													
2.0	26.7	23.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	57.	****	****	-14.	26.	39.	44.	49.	58.	59.	51.	SNR	
6.0	24.2	20.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	55.	****	-98.	17.	37.	48.	49.	57.	62.	52.	42.	SNR	
10.0	24.8	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	59.	15.	40.	49.	54.	57.	58.	61.	62.	54.	45.	SNR	
14.0	25.3	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	64.	23.	41.	51.	57.	61.	62.	64.	64.	55.	47.	SNR	
18.0	23.7	18.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	24.	42.	51.	59.	63.	65.	65.	57.	46.	29.	SNR	
22.0	26.0	22.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	63.	-51.	17.	41.	52.	58.	59.	62.	64.	52.	30.	SNR	
TX LOCATION = -2.47, 140.63													
RX LOCATION = 17.22, 100.62													
2.0	33.5	29.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	-8.	****	****	-54.	-6.	18.	30.	32.	44.	20.	41.	SNR	
6.0	30.7	26.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	16.	****	****	-49.	-3.	19.	28.	42.	27.	10.	51.	SNR	
10.0	30.7	24.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	39.	-30.	23.	38.	45.	48.	50.	52.	39.	24.	56.	SNR	
14.0	28.7	23.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	40.	20.	39.	47.	52.	55.	56.	55.	35.	16.	51.	SNR	
18.0	22.5	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	58.	7.	34.	46.	54.	59.	58.	56.	34.	7.	-34.	SNR	
22.0	20.6	17.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	53.	-71.	3.	28.	44.	51.	54.	36.	-14.	****	****	SNR	
TX LOCATION = -2.47, 140.63													
RX LOCATION = -12.20, 96.90													
2.0	37.4	33.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	54.	****	****	-76.	-11.	18.	34.	41.	49.	52.	52.	SNR	
6.0	32.7	29.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	51.	****	****	-56.	-3.	16.	32.	42.	47.	48.	51.	SNR	
10.0	31.8	26.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	60.	-10.	33.	44.	49.	53.	58.	60.	61.	60.	59.	SNR	
14.0	24.9	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

52.	60.	30.	47.	54.	59.	61.	61.	60.	57.	32.	1.	SNR	
18.0	16.4	12.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	58.	27.	49.	57.	58.	55.	32.	-1.	-52.	****	****	SNR	
22.0	12.7	11.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	49.	-16.	28.	45.	51.	-14.	****	****	****	****	****	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -34.87, 138.50													
2.0	34.0	30.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	47.	****	****	****	-46.	-10.	13.	30.	37.	44.	46.	SNR	
6.0	31.5	28.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	54.	****	-62.	-3.	18.	33.	43.	49.	53.	53.	55.	SNR	
10.0	25.6	21.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	57.	20.	30.	43.	51.	55.	57.	57.	56.	34.	9.	SNR	
14.0	18.6	15.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	54.	17.	39.	49.	53.	54.	51.	16.	-38.	****	****	SNR	
18.0	13.7	10.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	49.	22.	38.	49.	49.	27.	-14.	-80.	****	****	****	SNR	
22.0	29.7	26.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	56.	****	-13.	19.	37.	46.	52.	55.	55.	56.	37.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -12.33, 130.83													
2.0	33.1	29.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	58.	****	****	-23.	15.	32.	40.	51.	52.	55.	58.	SNR	
6.0	29.6	25.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	57.	****	-33.	13.	33.	45.	49.	51.	55.	58.	53.	SNR	
10.0	32.5	25.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	65.	32.	49.	57.	62.	65.	66.	66.	65.	65.	64.	SNR	
14.0	32.3	25.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	66.	40.	55.	63.	66.	68.	67.	67.	66.	66.	65.	SNR	
18.0	22.5	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	63.	32.	51.	61.	63.	64.	63.	62.	51.	36.	13.	SNR	
22.0	30.5	26.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	64.	-63.	14.	40.	51.	59.	61.	61.	63.	64.	61.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -23.67, 135.83													
2.0	41.4	37.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	40.	****	****	-68.	-8.	13.	32.	39.	43.	48.	53.	SNR	
6.0	37.4	31.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	19.	****	-49.	2.	25.	37.	44.	48.	51.	50.	29.	SNR	
10.0	40.5	34.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	26.	24.	43.	52.	58.	61.	62.	63.	61.	61.	55.	SNR	
14.0	34.3	28.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	26.	27.	47.	56.	61.	63.	63.	61.	60.	37.	11.	SNR	
18.0	19.5	14.8	3.0	6.0	9.0	12.0	15.0	19.0	21.0	24.0	27.0	30.0	FREQ
54.	42.	27.	45.	54.	55.	41.	11.	47.	32.	9.	-21.	SNR	
22.0	26.5	23.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	58.	****	3.	33.	44.	52.	56.	56.	58.	40.	11.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -19.33, 146.83													
2.0	36.8	33.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	59.	****	****	-43.	2.	26.	37.	43.	53.	54.	57.	SNR	
6.0	34.7	30.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	63.	****	-7.	28.	42.	51.	58.	60.	62.	61.	62.	SNR	
10.0	38.0	31.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

57.	65.	36.	52.	59.	63.	65.	65.	63.	67.	65.	65.	SNR	
14.0	34.2	27.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	65.	35.	55.	62.	65.	65.	64.	63.	58.	65.	64.	SNR	
18.0	18.9	14.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	39.	36.	50.	56.	56.	60.	58.	46.	29.	4.	-27.	SNR	
22.0	37.5	33.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	64.	-91.	2.	34.	47.	54.	58.	57.	60.	41.	11.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -17.30, 123.63													
2.0	39.4	35.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	56.	****	****	-65.	-10.	16.	32.	40.	44.	48.	27.	SNR	
6.0	35.3	30.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	56.	****	-60.	-9.	18.	34.	42.	45.	51.	34.	56.	SNR	
10.0	38.3	29.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	40.	24.	43.	53.	59.	62.	63.	62.	61.	58.	40.	SNR	
14.0	36.3	29.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	38.	36.	52.	59.	63.	65.	64.	62.	62.	47.	34.	SNR	
18.0	23.7	18.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	43.	25.	48.	58.	59.	58.	44.	21.	52.	43.	28.	SNR	
22.0	30.2	26.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	-21.	-89.	12.	37.	50.	54.	55.	58.	27.	-24.	55.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -2.47, 140.63													
2.0	22.8	19.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	69.	****	-70.	14.	43.	50.	63.	63.	55.	58.	60.	SNR	
6.0	18.8	15.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
71.	66.	-53.	21.	51.	60.	64.	69.	64.	62.	61.	57.	SNR	
10.0	19.2	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	50.	59.	62.	64.	65.	67.	60.	50.	35.	17.	SNR	
14.0	19.9	15.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	67.	46.	58.	62.	65.	67.	68.	61.	52.	40.	22.	SNR	
18.0	16.1	12.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	67.	48.	57.	63.	66.	67.	54.	34.	4.	-29.	-52.	SNR	
22.0	22.8	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
73.	71.	-11.	37.	56.	64.	66.	69.	72.	62.	50.	36.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = 14.67, 121.05													
2.0	22.2	19.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	55.	****	****	-1.	31.	42.	50.	57.	49.	36.	13.	SNR	
6.0	25.1	21.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	57.	****	-87.	19.	38.	48.	50.	56.	61.	54.	47.	SNR	
10.0	25.1	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	61.	17.	42.	51.	56.	58.	59.	62.	64.	56.	49.	SNR	
14.0	23.9	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	64.	21.	42.	52.	57.	61.	63.	65.	59.	53.	44.	SNR	
18.0	23.2	18.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	66.	22.	41.	52.	59.	64.	65.	66.	57.	46.	29.	SNR	
22.0	23.5	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	63.	-67.	19.	42.	54.	59.	61.	64.	55.	35.	0.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = 17.22, 100.62													
2.0	30.6	26.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	-10.	****	****	-41.	3.	25.	33.	42.	19.	-21.	52.	SNR	
6.0	34.9	29.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	51.	18.	****	****	-52.	-6.	18.	29.	36.	44.	31.	16.	SNR
10.0	34.5	26.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	40.	-37.	21.	37.	44.	48.	51.	53.	55.	40.	25.	SNR
14.0	30.6	24.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	40.	9.	33.	44.	51.	55.	57.	57.	42.	27.	57.	SNR
18.0	22.7	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	51.	59.	12.	35.	47.	55.	59.	59.	57.	38.	14.	-22.	SNR
22.0	19.5	16.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	49.	51.	****	-1.	27.	42.	49.	53.	28.	-13.	-75.	****	SNR
TX LOCATION = 13.45, 144.75													
RX LOCATION = -12.20, 96.90													
2.0	28.8	25.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	46.	38.	****	****	****	-18.	11.	26.	34.	32.	42.	30.	SNR
6.0	25.2	21.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	37.	29.	****	****	-74.	-18.	6.	20.	27.	37.	24.	8.	SNR
10.0	26.0	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	48.	54.	-30.	23.	38.	45.	50.	53.	54.	54.	40.	24.	SNR
14.0	26.7	21.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	43.	58.	15.	42.	51.	56.	59.	59.	59.	57.	42.	29.	SNR
18.0	23.0	18.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	39.	55.	9.	35.	48.	54.	56.	55.	53.	33.	7.	-32.	SNR
22.0	14.8	12.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	32.	43.	-66.	3.	32.	40.	29.	-55.	****	****	****	****	SNR
TX LOCATION = 14.67, 121.05													
RX LOCATION = -34.87, 138.50													
2.0	37.8	34.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	51.	51.	****	****	-94.	-31.	-7.	13.	28.	41.	45.	49.	SNR
6.0	34.5	30.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	36.	51.	****	****	-42.	-10.	14.	30.	39.	45.	49.	50.	SNR
10.0	27.2	22.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	56.	3.	21.	38.	47.	52.	55.	56.	56.	48.	23.	SNR
14.0	18.5	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	38.	53.	14.	38.	48.	53.	53.	49.	12.	-45.	****	****	SNR
18.0	15.3	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	37.	51.	23.	41.	49.	51.	45.	13.	-33.	-99.	****	****	SNR
22.0	21.9	18.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	36.	51.	-49.	14.	32.	41.	47.	50.	50.	9.	-64.	****	SNR
TX LOCATION = 14.67, 121.05													
RX LOCATION = -12.33, 130.83													
2.0	34.8	31.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	63.	60.	****	****	-11.	22.	37.	46.	53.	54.	57.	60.	SNR
6.0	29.5	25.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	61.	57.	****	****	-1.	27.	39.	49.	52.	56.	59.	53.	SNR
10.0	31.4	24.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	58.	65.	20.	46.	56.	61.	64.	65.	65.	65.	65.	64.	SNR
14.0	31.8	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	58.	66.	35.	53.	61.	66.	67.	67.	67.	66.	66.	64.	SNR
18.0	25.4	20.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	65.	42.	57.	64.	66.	67.	65.	65.	63.	52.	39.	SNR
22.0	23.5	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	55.	63.	-17.	34.	50.	57.	61.	61.	63.	52.	27.	-15.	SNR
TX LOCATION = 14.67, 121.05													
RX LOCATION = -23.67, 135.83													
2.0	34.0	30.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

55.	51.	****	****	-59.	-21.	9.	29.	40.	45.	48.	51.	SNR	
6.0	37.9	32.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	18.	****	****	-35.	4.	23.	36.	42.	45.	48.	29.	SNR	
10.0	31.2	26.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	61.	11.	36.	49.	55.	59.	61.	62.	61.	61.	59.	SNR	
14.0	26.0	21.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	61.	24.	46.	56.	60.	62.	62.	61.	60.	41.	18.	SNR	
18.0	16.6	12.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	57.	25.	46.	55.	57.	56.	35.	5.	-42.	****	****	SNR	
22.0	19.8	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	53.	-52.	19.	37.	48.	52.	54.	27.	-37.	****	****	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -19.33, 146.83													
2.0	29.1	25.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	41.	****	****	-71.	-14.	12.	28.	35.	36.	44.	34.	SNR	
6.0	34.8	29.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	20.	****	****	-22.	15.	31.	39.	41.	47.	33.	17.	SNR	
10.0	37.0	28.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	44.	9.	38.	48.	56.	59.	61.	60.	59.	57.	39.	SNR	
14.0	28.0	23.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	61.	23.	47.	57.	62.	64.	64.	63.	61.	59.	36.	SNR	
18.0	17.2	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	57.	22.	46.	55.	57.	56.	39.	13.	-29.	-85.	****	SNR	
22.0	23.0	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	55.	-88.	5.	32.	45.	51.	53.	56.	33.	-16.	-95.	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -17.30, 123.63													
2.0	40.7	36.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	62.	****	****	-21.	15.	35.	45.	51.	56.	60.	59.	SNR	
6.0	34.5	30.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	60.	****	****	-11.	21.	35.	45.	53.	54.	57.	59.	SNR	
10.0	36.4	30.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	14.	45.	54.	60.	63.	65.	66.	66.	65.	65.	SNR	
14.0	35.1	29.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	32.	52.	60.	64.	65.	65.	67.	66.	65.	65.	SNR	
18.0	25.7	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	64.	42.	56.	62.	64.	62.	57.	64.	61.	51.	39.	SNR	
22.0	21.3	19.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	61.	-7.	36.	50.	53.	54.	61.	58.	34.	-6.	-59.	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -2.47, 140.63													
2.0	26.7	23.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	59.	****	****	-11.	26.	39.	44.	49.	59.	59.	51.	SNR	
6.0	24.2	20.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	55.	****	-99.	14.	35.	47.	49.	58.	62.	52.	42.	SNR	
10.0	24.8	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	63.	23.	45.	54.	58.	61.	62.	64.	64.	55.	46.	SNR	
14.0	25.3	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	66.	37.	52.	58.	62.	65.	65.	66.	65.	56.	48.	SNR	
18.0	23.7	18.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	65.	38.	52.	60.	65.	66.	65.	65.	57.	46.	29.	SNR	
22.0	26.0	22.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	64.	-40.	27.	46.	55.	60.	60.	63.	64.	52.	30.	SNR	
TX LOCATION = 14.67, 121.05													

RX LOCATION = 13.45, 144.75

2.0	22.2	19.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	56.	****	****		0.	31.	42.	51.	58.	50.	36.	13.	SNR
6.0	25.1	21.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	59.	****	-87.		19.	39.	50.	54.	59.	63.	55.	47.	SNR
10.0	25.1	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	21.	44.		52.	58.	61.	63.	65.	65.	57.	49.	SNR
14.0	23.9	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	66.	24.	44.		54.	60.	64.	65.	66.	60.	54.	44.	SNR
18.0	23.2	18.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	66.	32.	47.		57.	62.	65.	66.	66.	57.	46.	29.	SNR
22.0	23.5	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	63.	-55.	27.		47.	56.	60.	61.	64.	55.	35.	0.	SNR

TX LOCATION = 14.67, 121.05

RX LOCATION = 17.22, 100.62

2.0	22.0	18.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	63.	****	-14.		25.	41.	57.	62.	65.	55.	42.	21.	SNR
6.0	24.0	20.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	57.	****	-85.		-3.	21.	44.	50.	57.	56.	36.	33.	SNR
10.0	25.1	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	63.	-19.	38.		52.	54.	57.	60.	64.	66.	57.	47.	SNR
14.0	22.0	17.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	39.	45.		53.	58.	62.	66.	66.	57.	44.	25.	SNR
18.0	22.1	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	67.	31.	44.		54.	61.	65.	67.	67.	56.	43.	24.	SNR
22.0	17.3	13.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	62.	4.	39.		54.	60.	64.	57.	43.	19.	-12.	-44.	SNR

TX LOCATION = 14.67, 121.05

RX LOCATION = -12.20, 96.90

2.0	43.0	37.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	-34.	****	-78.		-15.	19.	34.	45.	50.	52.	55.	56.	SNR
6.0	34.6	30.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	52.	****	****		-67.	-16.	10.	26.	35.	43.	46.	50.	SNR
10.0	35.6	30.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	-21.	27.		38.	43.	49.	53.	56.	58.	61.	62.	SNR
14.0	36.9	28.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	38.	34.	47.		54.	58.	61.	61.	61.	60.	45.	32.	SNR
18.0	30.3	24.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	35.	29.	49.		57.	61.	61.	61.	59.	37.	16.	57.	SNR
22.0	17.6	13.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	30.	8.	35.		47.	51.	16.	49.	31.	-1.	-44.	-87.	SNR

TX LOCATION = 17.22, 100.62

RX LOCATION = -34.87, 138.50

2.0	41.7	37.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
32.	54.	****	****		-90.	-35.	-8.	15.	30.	36.	41.	43.	SNR
6.0	38.0	33.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
31.	48.	****	****		****	-58.	-19.	18.	21.	29.	34.	46.	SNR
10.0	28.5	23.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
35.	53.	-53.	-5.		22.	35.	42.	46.	47.	53.	49.	27.	SNR
14.0	18.1	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
33.	50.	6.	26.		40.	50.	50.	37.	-4.	-73.	****	****	SNR
18.0	16.5	12.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
34.	50.	23.	34.		47.	50.	46.	22.	-14.	-71.	****	****	SNR
22.0	18.0	14.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	32.	47.	-43.	13.	37.	45.	47.	32.	0.	-58.	****	****	SNR
TX LOCATION = 17.22, 100.62													
RX LOCATION = -12.33, 130.83													
2.0	39.1	33.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	50.	-18.	****	****	-35.	-6.	13.	30.	37.	42.	47.	25.	SNR
6.0	31.7	28.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	45.	47.	****	****	-72.	-19.	8.	20.	33.	12.	46.	49.	SNR
10.0	32.0	27.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	52.	23.	-34.	21.	35.	40.	46.	50.	52.	39.	24.	58.	SNR
14.0	33.0	25.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	39.	27.	38.	49.	54.	57.	58.	57.	54.	33.	14.	SNR
18.0	22.5	18.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	50.	58.	21.	37.	50.	55.	57.	58.	56.	34.	14.	-16.	SNR
22.0	16.2	12.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	45.	48.	-23.	25.	40.	47.	50.	23.	-23.	-91.	****	****	SNR
TX LOCATION = 17.22, 100.62													
RX LOCATION = -23.67, 135.83													
2.0	34.6	29.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	47.	44.	****	****	-79.	-23.	4.	19.	30.	37.	43.	44.	SNR
6.0	27.2	24.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	28.	31.	****	****	-95.	-35.	-3.	16.	26.	31.	38.	14.	SNR
10.0	34.2	28.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	58.	-32.	11.	35.	45.	51.	55.	57.	58.	58.	57.	SNR
14.0	26.0	21.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	58.	8.	36.	49.	55.	58.	59.	58.	56.	34.	8.	SNR
18.0	17.2	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	38.	52.	12.	34.	48.	52.	51.	32.	3.	-44.	****	****	SNR
22.0	18.1	14.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	49.	-28.	21.	38.	46.	49.	41.	6.	-47.	****	****	SNR
TX LOCATION = 17.22, 100.62													
RX LOCATION = -19.33, 146.83													
2.0	32.3	27.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	42.	40.	****	****	-99.	-32.	-1.	15.	27.	35.	38.	43.	SNR
6.0	26.1	23.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	28.	31.	****	****	-86.	-27.	2.	19.	24.	34.	24.	4.	SNR
10.0	26.7	22.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	46.	51.	-47.	24.	37.	36.	44.	48.	51.	51.	38.	25.	SNR
14.0	29.6	24.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	58.	7.	34.	48.	54.	57.	58.	59.	58.	56.	38.	SNR
18.0	18.5	14.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	37.	53.	19.	32.	47.	52.	52.	45.	18.	-18.	-69.	****	SNR
22.0	21.3	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	34.	50.	-87.	8.	29.	42.	48.	49.	41.	13.	-27.	-85.	SNR
TX LOCATION = 17.22, 100.62													
RX LOCATION = -17.30, 123.63													
2.0	31.5	27.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	52.	47.	****	-86.	-25.	-2.	14.	30.	37.	43.	47.	51.	SNR
6.0	34.7	30.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	45.	49.	****	****	-82.	-27.	1.	17.	29.	37.	17.	-8.	SNR
10.0	35.3	30.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	55.	23.	-41.	20.	33.	39.	43.	49.	51.	53.	38.	23.	SNR
14.0	28.8	24.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	59.	17.	39.	50.	56.	58.	59.	60.	59.	58.	39.	SNR
18.0	21.2	17.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ



51.	58.	23.	36.	49.	55.	57.	58.	52.	17.	44.	-89.	SNR	
22.0	13.5	10.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	46.	-9.	30.	43.	48.	26.	-15.	-81.	****	****	****	****	SNR
TX LOCATION = 17.22, 100.62													
RX LOCATION = -2.47, 140.63													
2.0	33.5	28.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	-15.	****	****	-41.	2.	23.	35.	40.	47.	12.	39.	39.	SNR
6.0	30.7	26.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	16.	****	****	-57.	-10.	13.	20.	38.	27.	10.	48.	48.	SNR
10.0	30.7	24.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	41.	-33.	15.	34.	44.	50.	53.	54.	41.	24.	55.	55.	SNR
14.0	28.7	22.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	43.	21.	37.	48.	54.	57.	58.	55.	34.	12.	51.	51.	SNR
18.0	22.5	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	59.	22.	43.	52.	58.	60.	59.	57.	34.	7.	-34.	-34.	SNR
22.0	20.6	16.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	52.	-60.	16.	37.	47.	52.	53.	38.	13.	-27.	-82.	-82.	SNR
TX LOCATION = 17.22, 100.62													
RX LOCATION = 13.45, 144.75													
2.0	30.6	26.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	5.	****	****	-40.	3.	25.	33.	42.	23.	-6.	52.	52.	SNR
6.0	34.9	28.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	21.	****	****	-50.	-5.	20.	32.	39.	45.	29.	8.	8.	SNR
10.0	34.5	27.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	36.	-41.	16.	34.	43.	50.	55.	56.	57.	39.	19.	19.	SNR
14.0	30.6	24.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	37.	4.	31.	43.	52.	57.	58.	58.	41.	21.	57.	57.	SNR
18.0	22.7	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	59.	13.	36.	47.	55.	58.	58.	57.	38.	16.	-18.	-18.	SNR
22.0	19.5	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	50.	-88.	10.	33.	45.	50.	51.	30.	1.	-44.	****	****	SNR
TX LOCATION = 17.22, 100.62													
RX LOCATION = 14.67, 121.05													
2.0	22.0	18.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	62.	****	-13.	25.	41.	56.	62.	65.	55.	42.	21.	21.	SNR
6.0	24.0	20.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	56.	****	-83.	-3.	20.	43.	49.	56.	55.	36.	33.	33.	SNR
10.0	25.1	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	63.	-24.	33.	49.	52.	56.	60.	63.	66.	57.	47.	47.	SNR
14.0	22.0	17.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	30.	40.	50.	56.	61.	65.	66.	56.	44.	25.	25.	SNR
18.0	22.1	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	67.	23.	39.	50.	58.	64.	67.	67.	56.	43.	24.	24.	SNR
22.0	17.3	13.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	62.	4.	40.	54.	59.	63.	56.	42.	19.	-12.	-44.	-44.	SNR
TX LOCATION = 17.22, 100.62													
RX LOCATION = -12.20, 96.90													
2.0	39.6	34.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	64.	****	-31.	16.	35.	45.	54.	59.	62.	63.	63.	63.	SNR
6.0	31.5	28.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	55.	****	****	-49.	-1.	17.	30.	45.	49.	53.	57.	57.	SNR
10.0	32.5	27.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	64.	-52.	18.	37.	45.	52.	57.	61.	62.	64.	64.	64.	SNR
14.0	35.4	27.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

58.	66.	35.	46.	55.	61.	63.	65.	66.	66.	66.	65.	SNR
18.0	32.2	25.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
57.	66.	30.	48.	60.	64.	66.	66.	66.	66.	65.	64.	SNR
22.0	17.1	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
53.	60.	25.	41.	55.	58.	60.	50.	30.	-4.	-46.	-88.	SNR
TX LOCATION = -12.20, 96.90												
RX LOCATION = -34.87, 138.50												
2.0	33.6	29.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
52.	55.	****	-88.	-15.	16.	25.	38.	49.	52.	53.	55.	SNR
6.0	31.3	27.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
49.	51.	****	****	-41.	2.	24.	35.	43.	48.	50.	52.	SNR
10.0	23.1	20.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
51.	57.	0.	31.	43.	50.	54.	57.	57.	34.	-9.	-78.	SNR
14.0	13.2	10.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
46.	52.	29.	43.	50.	52.	17.	-53.	****	****	****	****	SNR
18.0	12.5	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
45.	51.	25.	43.	50.	49.	21.	-17.	-73.	****	****	****	SNR
22.0	10.2	7.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
40.	42.	15.	39.	43.	22.	-18.	-79.	****	****	****	****	SNR
TX LOCATION = -12.20, 96.90												
RX LOCATION = -12.33, 130.83												
2.0	47.2	42.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
54.	44.	****	-65.	-6.	21.	37.	44.	53.	56.	56.	58.	SNR
6.0	41.6	37.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
53.	62.	****	****	-31.	8.	29.	42.	51.	54.	54.	35.	SNR
10.0	35.3	31.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
55.	65.	8.	38.	51.	58.	62.	63.	62.	62.	32.	65.	SNR
14.0	24.9	20.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
55.	64.	33.	53.	60.	62.	61.	46.	64.	60.	47.	32.	SNR
18.0	17.0	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
53.	62.	41.	54.	59.	55.	61.	48.	21.	-23.	-73.	****	SNR
22.0	14.0	10.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
51.	55.	24.	46.	50.	56.	47.	25.	-11.	-54.	-97.	****	SNR
TX LOCATION = -12.20, 96.90												
RX LOCATION = -23.67, 135.83												
2.0	34.4	30.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
58.	56.	****	-60.	-13.	18.	33.	42.	51.	53.	56.	56.	SNR
6.0	41.3	36.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
52.	-45.	****	****	-29.	8.	28.	39.	45.	48.	52.	54.	SNR
10.0	23.8	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
59.	60.	6.	34.	48.	55.	59.	60.	60.	43.	11.	-46.	SNR
14.0	19.6	16.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
54.	30.	32.	49.	56.	57.	42.	5.	46.	26.	-6.	-46.	SNR
18.0	16.1	12.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
53.	40.	34.	50.	55.	51.	20.	45.	31.	9.	-18.	-49.	SNR
22.0	14.0	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
52.	47.	21.	43.	47.	29.	46.	34.	13.	-15.	-47.	-79.	SNR
TX LOCATION = -12.20, 96.90												
RX LOCATION = -19.33, 146.83												
2.0	37.4	33.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
52.	53.	****	****	-56.	-9.	10.	23.	36.	47.	50.	52.	SNR
6.0	33.8	30.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
49.	51.	****	****	-51.	-8.	18.	31.	39.	45.	48.	50.	SNR
10.0	26.5	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ

	47.	57.	-5.	22.	42.	51.	56.	57.	57.	57.	38.	18.	SNR
14.0	17.6	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	56.	19.	44.	52.	56.	55.	38.	21.	-6.	-42.	-87.	SNR
18.0	14.1	11.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	39.	54.	21.	44.	52.	54.	28.	-36.	****	****	****	****	SNR
22.0	12.3	9.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	43.	-12.	31.	43.	42.	4.	-61.	****	****	****	****	SNR
TX LOCATION = -12.20, 96.90													
RX LOCATION = -17.30, 123.63													
2.0	42.6	37.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	66.	****	-35.	18.	37.	46.	57.	59.	63.	65.	64.	SNR
6.0	37.3	33.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	55.	62.	****	****	-8.	22.	36.	46.	54.	59.	58.	61.	SNR
10.0	30.9	27.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	66.	13.	44.	54.	60.	65.	66.	65.	66.	66.	66.	SNR
14.0	20.9	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	65.	40.	57.	63.	65.	64.	65.	56.	43.	21.	-10.	SNR
18.0	14.7	12.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	64.	46.	59.	63.	63.	54.	28.	-19.	-71.	-88.	-88.	SNR
22.0	11.1	8.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	55.	38.	51.	56.	49.	22.	-23.	-72.	-87.	-86.	-86.	SNR
TX LOCATION = -12.20, 96.90													
RX LOCATION = -2.47, 140.63													
2.0	37.4	33.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	54.	****	****	-76.	-13.	16.	33.	41.	50.	52.	52.	SNR
6.0	32.7	29.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	51.	****	****	-57.	-4.	16.	32.	42.	47.	48.	51.	SNR
10.0	31.8	28.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	60.	-14.	28.	40.	48.	54.	59.	60.	62.	60.	61.	SNR
14.0	24.9	20.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	60.	21.	40.	50.	57.	61.	61.	60.	58.	33.	7.	SNR
18.0	16.4	13.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	50.	58.	23.	46.	55.	58.	57.	26.	-30.	****	****	****	SNR
22.0	12.7	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	43.	45.	-9.	32.	44.	46.	16.	-38.	****	****	****	****	SNR
TX LOCATION = -12.20, 96.90													
RX LOCATION = 13.45, 144.75													
2.0	28.8	25.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	47.	45.	****	****	****	-11.	16.	29.	39.	42.	47.	30.	SNR
6.0	25.2	21.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	34.	****	****	-71.	-13.	10.	26.	33.	40.	27.	10.	SNR
10.0	26.0	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	48.	54.	-39.	14.	32.	42.	49.	53.	54.	54.	39.	24.	SNR
14.0	26.7	21.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	43.	58.	-3.	27.	41.	50.	56.	58.	58.	57.	42.	29.	SNR
18.0	23.0	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	56.	0.	31.	43.	52.	56.	56.	55.	33.	0.	-52.	SNR
22.0	14.8	11.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	32.	40.	-55.	10.	34.	41.	31.	1.	-54.	****	****	****	SNR
TX LOCATION = -12.20, 96.90													
RX LOCATION = 14.67, 121.05													
2.0	43.0	38.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	54.	63.	****	-80.	-15.	18.	33.	44.	49.	52.	55.	57.	SNR
6.0	34.6	30.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	50.	56.	****	****	-61.	-10.	16.	29.	37.	44.	51.	55.	SNR
10.0	35.6	30.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	63.	-34.	18.	34.	42.	48.	52.	54.	57.	62.	63.	SNR
14.0	36.9	28.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	38.	13.	31.	43.	50.	56.	58.	59.	59.	45.	32.	SNR
18.0	30.3	25.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	21.	4.	31.	44.	53.	59.	60.	59.	32.	-2.	57.	SNR
22.0	17.6	13.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	52.	34.	0.	30.	42.	47.	20.	49.	35.	11.	-22.	-58.	SNR
TX LOCATION = -12.20, 96.90													
RX LOCATION = 17.22, 100.62													
2.0	39.6	35.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	65.	****	-31.	21.	37.	45.	56.	60.	62.	63.	63.	SNR
6.0	31.5	28.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	59.	56.	****	****	-49.	0.	18.	29.	44.	49.	54.	57.	SNR
10.0	32.5	28.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	62.	64.	-60.	15.	35.	45.	51.	55.	59.	61.	64.	65.	SNR
14.0	35.4	29.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	58.	66.	23.	38.	48.	55.	60.	63.	65.	66.	66.	66.	SNR
18.0	32.2	26.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	66.	18.	38.	51.	59.	64.	65.	66.	66.	66.	65.	SNR
22.0	17.1	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	57.	18.	37.	49.	55.	58.	50.	35.	10.	-23.	-59.	SNR

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 6  
 Sunspot Number = 150.00

Time-of-day (UT) = 2  
 Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-999.0	-61.0	-92.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Darwin	-999.0	500.0	-98.0	-999.0	-70.0	-999.0	-999.0	-999.0	-999.0	-999.0
ASprin	-61.0	-98.0	500.0	-94.0	-82.0	-999.0	-999.0	-999.0	-999.0	-999.0
TownsV	-92.0	-999.0	-94.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Derby	-999.0	-70.0	-82.0	-999.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0
Jayapu	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0	-999.0	-999.0
Guam	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0

Time-of-day (UT) = 2  
 Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-69.0	18.0	-9.0	-44.0	-999.0	-999.0	-999.0	-999.0	-88.0
Darwin	-69.0	500.0	-6.0	-29.0	15.0	-36.0	-999.0	-999.0	-999.0	-65.0
ASprin	18.0	-6.0	500.0	-3.0	1.0	-999.0	-999.0	-999.0	-999.0	-60.0
TownsV	-9.0	-29.0	-3.0	500.0	-85.0	-48.0	-999.0	-999.0	-999.0	-999.0
Derby	-44.0	15.0	1.0	-85.0	500.0	-999.0	-999.0	-999.0	-89.0	-35.0
Jayapu	-999.0	-36.0	-999.0	-48.0	-999.0	500.0	-71.0	-999.0	-999.0	-999.0
Guam	-999.0	-999.0	-999.0	-999.0	-999.0	-70.0	500.0	-999.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-14.0	-78.0
Songkh	-999.0	-999.0	-999.0	-999.0	-86.0	-999.0	-999.0	-13.0	500.0	-31.0
Cocos	-88.0	-65.0	-60.0	-999.0	-35.0	-999.0	-999.0	-80.0	-31.0	500.0

Time-of-day (UT) = 2  
 Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-7.0	41.0	27.0	2.0	-39.0	-999.0	-95.0	-91.0	-15.0
Darwin	-7.0	500.0	29.0	16.0	51.0	23.0	-22.0	-10.0	-37.0	-6.0
ASprin	41.0	29.0	500.0	33.0	33.0	-19.0	-71.0	-59.0	-80.0	-13.0
TownsV	27.0	16.0	33.0	500.0	-13.0	7.0	-44.0	-62.0	-95.0	-57.0
Derby	2.0	51.0	33.0	-13.0	500.0	-13.0	-57.0	-23.0	-27.0	17.0
Jayapu	-38.0	24.0	-19.0	7.0	-13.0	500.0	13.0	-14.0	-54.0	-76.0
Guam	-999.0	-23.0	-68.0	-43.0	-65.0	14.0	500.0	-1.0	-41.0	-999.0
Manila	-94.0	-11.0	-59.0	-71.0	-21.0	-11.0	0.0	500.0	25.0	-15.0
Songkh	-90.0	-35.0	-79.0	-99.0	-25.0	-41.0	-40.0	25.0	500.0	16.0
Cocos	-15.0	-6.0	-13.0	-56.0	18.0	-76.0	-999.0	-15.0	21.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	24.0	54.0	42.0	27.0	-2.0	-45.0	-31.0	-35.0	17.0
Darwin	24.0	500.0	51.0	36.0	55.0	40.0	16.0	23.0	-2.0	21.0
ASprin	53.0	51.0	500.0	52.0	47.0	16.0	-9.0	-21.0	-16.0	18.0
TownsV	42.0	36.0	52.0	500.0	21.0	33.0	2.0	-4.0	-26.0	-9.0
Derby	27.0	55.0	47.0	21.0	500.0	19.0	-1.0	15.0	5.0	37.0
Jayapu	-1.0	41.0	17.0	34.0	21.0	500.0	44.0	26.0	-6.0	-11.0
Guam	-46.0	15.0	-8.0	2.0	-10.0	43.0	500.0	31.0	3.0	-18.0
Manila	-31.0	22.0	-21.0	-14.0	15.0	26.0	31.0	500.0	41.0	19.0
Songkh	-35.0	-6.0	-23.0	-32.0	-2.0	2.0	3.0	41.0	500.0	35.0
Cocos	16.0	21.0	18.0	-9.0	37.0	-13.0	-11.0	18.0	37.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	38.0	62.0	53.0	42.0	22.0	-10.0	-7.0	-8.0	26.0
Darwin	38.0	500.0	54.0	47.0	64.0	55.0	32.0	37.0	17.0	37.0
ASprin	62.0	54.0	500.0	60.0	56.0	33.0	12.0	8.0	13.0	34.0
TownsV	52.0	47.0	60.0	500.0	36.0	45.0	26.0	17.0	6.0	11.0
Derby	41.0	63.0	56.0	36.0	500.0	36.0	25.0	34.0	20.0	47.0
Jayapu	23.0	56.0	35.0	46.0	37.0	500.0	51.0	39.0	18.0	18.0
Guam	-10.0	32.0	13.0	26.0	16.0	50.0	500.0	42.0	25.0	11.0
Manila	-7.0	37.0	9.0	12.0	35.0	39.0	42.0	500.0	57.0	34.0
Songkh	-8.0	13.0	4.0	-1.0	14.0	23.0	25.0	56.0	500.0	45.0
Cocos	25.0	37.0	33.0	10.0	46.0	16.0	16.0	33.0	45.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	45.0	66.0	59.0	52.0	36.0	13.0	12.0	14.0	38.0
Darwin	45.0	500.0	62.0	54.0	68.0	59.0	40.0	46.0	33.0	45.0
ASprin	66.0	62.0	500.0	65.0	62.0	43.0	30.0	28.0	25.0	42.0
TownsV	59.0	54.0	65.0	500.0	44.0	56.0	37.0	33.0	20.0	23.0
Derby	51.0	68.0	62.0	44.0	500.0	46.0	37.0	44.0	38.0	57.0
Jayapu	37.0	59.0	44.0	57.0	47.0	500.0	64.0	44.0	30.0	34.0
Guam	13.0	40.0	32.0	37.0	32.0	63.0	500.0	50.0	33.0	26.0
Manila	13.0	46.0	29.0	28.0	45.0	44.0	51.0	500.0	62.0	45.0
Songkh	15.0	30.0	19.0	15.0	30.0	35.0	33.0	62.0	500.0	54.0
Cocos	38.0	44.0	42.0	23.0	57.0	33.0	29.0	44.0	56.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	58.0	70.0	62.0	60.0	43.0	30.0	28.0	30.0	49.0
Darwin	58.0	500.0	66.0	60.0	62.0	63.0	52.0	53.0	41.0	53.0

ASprin	70.0	66.0	500.0	61.0	66.0	52.0	39.0	39.0	39.0	51.0
TownsV	62.0	60.0	61.0	500.0	51.0	58.0	43.0	41.0	34.0	36.0
Derby	60.0	62.0	66.0	51.0	500.0	51.0	44.0	50.0	44.0	59.0
Jayapu	43.0	63.0	52.0	58.0	52.0	500.0	63.0	49.0	32.0	41.0
Guam	30.0	51.0	39.0	43.0	40.0	63.0	500.0	57.0	42.0	34.0
Manila	28.0	53.0	40.0	35.0	51.0	49.0	58.0	500.0	65.0	50.0
Songkh	30.0	37.0	30.0	27.0	37.0	40.0	42.0	65.0	500.0	59.0
Cocos	49.0	53.0	51.0	36.0	59.0	41.0	39.0	49.0	60.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	60.0	36.0	65.0	62.0	48.0	38.0	41.0	36.0	52.0
Darwin	60.0	500.0	71.0	63.0	45.0	66.0	53.0	55.0	45.0	56.0
ASprin	36.0	70.0	500.0	41.0	69.0	58.0	42.0	45.0	44.0	53.0
TownsV	65.0	63.0	41.0	500.0	59.0	62.0	52.0	44.0	41.0	47.0
Derby	62.0	45.0	69.0	59.0	500.0	58.0	51.0	56.0	49.0	63.0
Jayapu	48.0	66.0	58.0	62.0	58.0	500.0	55.0	58.0	44.0	49.0
Guam	37.0	52.0	43.0	53.0	44.0	55.0	500.0	49.0	19.0	32.0
Manila	41.0	54.0	45.0	36.0	56.0	59.0	50.0	500.0	55.0	52.0
Songkh	36.0	42.0	37.0	35.0	43.0	47.0	23.0	55.0	500.0	62.0
Cocos	52.0	56.0	53.0	47.0	63.0	50.0	42.0	52.0	62.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	62.0	-11.0	57.0	63.0	53.0	44.0	45.0	41.0	53.0
Darwin	62.0	500.0	44.0	66.0	17.0	56.0	56.0	58.0	49.0	56.0
ASprin	-11.0	44.0	500.0	7.0	53.0	61.0	48.0	47.0	48.0	56.0
TownsV	57.0	66.0	7.0	500.0	62.0	64.0	54.0	49.0	44.0	50.0
Derby	63.0	17.0	53.0	62.0	500.0	60.0	51.0	59.0	51.0	65.0
Jayapu	52.0	56.0	61.0	64.0	61.0	500.0	58.0	59.0	20.0	52.0
Guam	44.0	55.0	48.0	54.0	48.0	58.0	500.0	36.0	-21.0	42.0
Manila	45.0	57.0	48.0	44.0	60.0	59.0	36.0	500.0	42.0	55.0
Songkh	41.0	47.0	43.0	38.0	47.0	12.0	-6.0	42.0	500.0	63.0
Cocos	53.0	56.0	56.0	50.0	65.0	52.0	47.0	55.0	63.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	63.0	-31.0	30.0	65.0	-24.0	46.0	49.0	43.0	55.0
Darwin	64.0	500.0	14.0	51.0	-13.0	38.0	59.0	60.0	25.0	58.0
ASprin	-31.0	14.0	500.0	-28.0	29.0	63.0	53.0	51.0	50.0	56.0
TownsV	30.0	51.0	-28.0	500.0	64.0	54.0	56.0	34.0	47.0	52.0
Derby	65.0	-13.0	29.0	64.0	500.0	63.0	21.0	59.0	53.0	64.0
Jayapu	-2.0	38.0	63.0	54.0	63.0	500.0	60.0	51.0	41.0	52.0
Guam	46.0	58.0	53.0	57.0	27.0	60.0	500.0	13.0	52.0	30.0
Manila	49.0	60.0	51.0	34.0	59.0	51.0	13.0	500.0	21.0	56.0

Songkh	43.0	25.0	44.0	43.0	51.0	39.0	52.0	21.0	500.0	63.0
Cocos	55.0	58.0	56.0	52.0	64.0	52.0	30.0	57.0	63.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-999.0	5.0	3.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Darwin	-999.0	500.0	-36.0	-32.0	-48.0	-60.0	-999.0	-999.0	-999.0	-999.0
ASprin	5.0	-36.0	500.0	-1.0	-43.0	-999.0	-999.0	-999.0	-999.0	-999.0
TownsV	3.0	-32.0	-1.0	500.0	-999.0	-90.0	-999.0	-999.0	-999.0	-999.0
Derby	-999.0	-48.0	-43.0	-999.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0
Jayapu	-999.0	-60.0	-999.0	-90.0	-999.0	500.0	-48.0	-999.0	-999.0	-999.0
Guam	-999.0	-999.0	-999.0	-999.0	-999.0	-53.0	500.0	-999.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-4.0	46.0	42.0	0.0	-16.0	-59.0	-999.0	-999.0	-999.0
Darwin	-5.0	500.0	26.0	25.0	26.0	13.0	-24.0	-999.0	-999.0	-999.0
ASprin	46.0	26.0	500.0	44.0	20.0	-7.0	-41.0	-999.0	-999.0	-999.0
TownsV	42.0	25.0	44.0	500.0	-10.0	28.0	-10.0	-999.0	-999.0	-999.0
Derby	-1.0	26.0	20.0	-10.0	500.0	-36.0	-47.0	-999.0	-999.0	-999.0
Jayapu	-17.0	13.0	-6.0	28.0	-36.0	500.0	20.0	-98.0	-999.0	-999.0
Guam	-62.0	-33.0	-49.0	-7.0	-60.0	21.0	500.0	-87.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-99.0	-87.0	500.0	-85.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-83.0	500.0	-999.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	31.0	61.0	56.0	30.0	24.0	-2.0	-43.0	-999.0	-40.0
Darwin	30.0	500.0	47.0	45.0	58.0	43.0	19.0	-1.0	-69.0	-31.0
ASprin	61.0	47.0	500.0	61.0	44.0	29.0	8.0	-29.0	-87.0	-29.0
TownsV	56.0	45.0	61.0	500.0	28.0	48.0	25.0	-17.0	-81.0	-51.0
Derby	29.0	58.0	44.0	28.0	500.0	14.0	0.0	-13.0	-74.0	-8.0
Jayapu	22.0	45.0	30.0	49.0	16.0	500.0	50.0	17.0	-49.0	-56.0
Guam	-3.0	13.0	2.0	28.0	-9.0	51.0	500.0	19.0	-52.0	-74.0
Manila	-42.0	-1.0	-35.0	-22.0	-11.0	14.0	19.0	500.0	-3.0	-67.0
Songkh	-999.0	-72.0	-95.0	-86.0	-82.0	-57.0	-50.0	-3.0	500.0	-49.0
Cocos	-41.0	-31.0	-29.0	-51.0	-8.0	-57.0	-71.0	-61.0	-49.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 12



TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	41.0	64.0	61.0	41.0	36.0	19.0	-11.0	-60.0	2.0
Darwin	41.0	500.0	60.0	57.0	62.0	57.0	35.0	27.0	-16.0	7.0
ASprin	63.0	60.0	500.0	65.0	59.0	40.0	29.0	9.0	-27.0	6.0
TownsV	60.0	56.0	64.0	500.0	40.0	56.0	40.0	18.0	-23.0	-10.0
Derby	41.0	62.0	59.0	41.0	500.0	37.0	23.0	18.0	-18.0	22.0
Jayapu	36.0	59.0	42.0	59.0	38.0	500.0	60.0	37.0	-3.0	-3.0
Guam	18.0	33.0	25.0	42.0	18.0	60.0	500.0	38.0	-6.0	-18.0
Manila	-10.0	27.0	4.0	15.0	21.0	35.0	39.0	500.0	21.0	-16.0
Songkh	-58.0	-19.0	-35.0	-27.0	-27.0	-10.0	-5.0	20.0	500.0	-1.0
Cocos	2.0	8.0	8.0	-8.0	22.0	-4.0	-13.0	-10.0	0.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	53.0	66.0	63.0	49.0	43.0	34.0	12.0	-21.0	24.0
Darwin	53.0	500.0	63.0	61.0	65.0	60.0	47.0	38.0	12.0	28.0
ASprin	65.0	62.0	500.0	67.0	61.0	51.0	40.0	27.0	3.0	27.0
TownsV	61.0	60.0	66.0	500.0	52.0	59.0	48.0	33.0	5.0	15.0
Derby	49.0	66.0	62.0	54.0	500.0	45.0	38.0	33.0	11.0	35.0
Jayapu	43.0	62.0	54.0	62.0	46.0	500.0	65.0	48.0	19.0	16.0
Guam	33.0	45.0	37.0	51.0	34.0	64.0	500.0	48.0	18.0	6.0
Manila	14.0	39.0	23.0	31.0	35.0	47.0	50.0	500.0	44.0	10.0
Songkh	-19.0	8.0	-3.0	2.0	1.0	13.0	20.0	43.0	500.0	17.0
Cocos	24.0	29.0	28.0	18.0	36.0	16.0	10.0	16.0	18.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	59.0	69.0	65.0	59.0	49.0	43.0	27.0	16.0	35.0
Darwin	58.0	500.0	67.0	63.0	69.0	63.0	52.0	47.0	23.0	40.0
ASprin	68.0	67.0	500.0	70.0	65.0	57.0	47.0	37.0	23.0	38.0
TownsV	64.0	63.0	69.0	500.0	58.0	61.0	56.0	41.0	24.0	29.0
Derby	59.0	70.0	65.0	59.0	500.0	56.0	46.0	41.0	24.0	45.0
Jayapu	50.0	64.0	59.0	63.0	57.0	500.0	70.0	49.0	28.0	32.0
Guam	43.0	49.0	44.0	58.0	42.0	69.0	500.0	50.0	29.0	20.0
Manila	30.0	49.0	36.0	39.0	45.0	49.0	54.0	500.0	50.0	26.0
Songkh	18.0	20.0	16.0	19.0	17.0	20.0	32.0	49.0	500.0	30.0
Cocos	35.0	42.0	39.0	31.0	46.0	32.0	26.0	29.0	29.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	62.0	58.0	67.0	62.0	53.0	49.0	37.0	18.0	43.0
Darwin	61.0	500.0	70.0	66.0	57.0	67.0	55.0	50.0	34.0	50.0
ASprin	58.0	70.0	500.0	58.0	68.0	61.0	52.0	44.0	32.0	45.0
TownsV	67.0	66.0	58.0	500.0	61.0	65.0	59.0	44.0	32.0	39.0

Derby	62.0	57.0	68.0	61.0	500.0	60.0	50.0	49.0	34.0	54.0
Jayapu	54.0	68.0	61.0	66.0	61.0	500.0	65.0	57.0	42.0	42.0
Guam	49.0	51.0	48.0	60.0	45.0	64.0	500.0	56.0	36.0	27.0
Manila	39.0	52.0	42.0	41.0	53.0	58.0	59.0	500.0	57.0	35.0
Songkh	21.0	33.0	26.0	24.0	29.0	38.0	39.0	56.0	500.0	45.0
Cocos	43.0	51.0	45.0	39.0	54.0	42.0	33.0	37.0	44.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	64.0	29.0	68.0	64.0	56.0	53.0	43.0	28.0	48.0
Darwin	63.0	500.0	56.0	68.0	38.0	62.0	58.0	55.0	11.0	54.0
ASprin	29.0	56.0	500.0	36.0	59.0	63.0	54.0	48.0	39.0	48.0
TownsV	68.0	68.0	36.0	500.0	64.0	67.0	61.0	51.0	40.0	45.0
Derby	64.0	38.0	59.0	64.0	500.0	62.0	54.0	52.0	41.0	59.0
Jayapu	56.0	62.0	64.0	67.0	62.0	500.0	62.0	62.0	27.0	47.0
Guam	53.0	55.0	51.0	62.0	51.0	62.0	500.0	61.0	44.0	37.0
Manila	45.0	56.0	45.0	47.0	54.0	62.0	63.0	500.0	56.0	43.0
Songkh	29.0	12.0	31.0	34.0	37.0	27.0	45.0	55.0	500.0	49.0
Cocos	48.0	54.0	48.0	45.0	59.0	47.0	40.0	44.0	49.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	65.0	-11.0	49.0	66.0	17.0	54.0	48.0	34.0	50.0
Darwin	65.0	500.0	35.0	58.0	12.0	50.0	60.0	59.0	50.0	54.0
ASprin	-11.0	35.0	500.0	5.0	43.0	65.0	52.0	52.0	43.0	52.0
TownsV	49.0	58.0	5.0	500.0	65.0	69.0	61.0	30.0	27.0	48.0
Derby	66.0	12.0	43.0	65.0	500.0	64.0	29.0	56.0	14.0	58.0
Jayapu	24.0	50.0	65.0	69.0	64.0	500.0	61.0	52.0	10.0	48.0
Guam	53.0	58.0	50.0	61.0	34.0	61.0	500.0	54.0	31.0	24.0
Manila	49.0	59.0	48.0	33.0	57.0	52.0	55.0	500.0	36.0	46.0
Songkh	34.0	46.0	38.0	24.0	17.0	10.0	29.0	36.0	500.0	53.0
Cocos	50.0	54.0	52.0	48.0	58.0	48.0	27.0	51.0	54.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	66.0	-23.0	18.0	66.0	63.0	55.0	50.0	46.0	52.0
Darwin	66.0	500.0	7.0	43.0	-6.0	31.0	54.0	53.0	52.0	37.0
ASprin	-23.0	7.0	500.0	-21.0	17.0	67.0	19.0	23.0	15.0	54.0
TownsV	18.0	43.0	-21.0	500.0	66.0	51.0	62.0	0.0	2.0	50.0
Derby	66.0	-6.0	17.0	66.0	500.0	66.0	59.0	59.0	-28.0	61.0
Jayapu	63.0	31.0	67.0	51.0	66.0	500.0	57.0	42.0	51.0	51.0
Guam	55.0	53.0	29.0	62.0	56.0	57.0	500.0	47.0	16.0	8.0
Manila	50.0	53.0	29.0	17.0	59.0	42.0	47.0	500.0	33.0	50.0
Songkh	46.0	49.0	14.0	4.0	-8.0	48.0	8.0	33.0	500.0	57.0
Cocos	52.0	35.0	54.0	50.0	61.0	51.0	10.0	55.0	57.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	41.0	61.0	56.0	42.0	35.0	14.0	-8.0	-56.0	3.0
Darwin	39.0	500.0	56.0	53.0	60.0	51.0	24.0	8.0	-42.0	8.0
ASprin	60.0	56.0	500.0	61.0	56.0	37.0	15.0	-2.0	-39.0	8.0
TownsV	55.0	53.0		00.0	39.0	50.0	27.0	-4.0	-55.0	-4.0
Derby	40.0	60.0	56.0	39.0	500.0	33.0	16.0	0.0	-49.0	14.0
Jayapu	36.0	55.0	40.0	53.0	37.0	500.0	45.0	15.0	-30.0	-10.0
Guam	20.0	32.0	24.0	36.0	24.0	50.0	500.0	17.0	-37.0	-30.0
Manila	3.0	20.0	11.0	9.0	14.0	23.0	21.0	500.0	-19.0	-21.0
Songkh	-53.0	-34.0	-32.0	-47.0	-41.0	-33.0	-41.0	-24.0	500.0	-52.0
Cocos	0.0	8.0	6.0	-5.0	13.0	-14.0	-39.0	-34.0	-60.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	55.0	64.0	61.0	56.0	45.0	35.0	25.0	6.0	35.0
Darwin	53.0	500.0	62.0	56.0	65.0	59.0	42.0	38.0	17.0	39.0
ASprin	63.0	62.0	500.0	65.0	62.0	47.0	34.0	24.0	4.0	38.0
TownsV	59.0	56.0	65.0	500.0	51.0	56.0	41.0	33.0	19.0	25.0
Derby	54.0	66.0	62.0	52.0	500.0	46.0	38.0	34.0	17.0	46.0
Jayapu	41.0	63.0	50.0	59.0	51.0	500.0	54.0	40.0	23.0	33.0
Guam	30.0	49.0	43.0	52.0	43.0	59.0	500.0	42.0	21.0	23.0
Manila	21.0	46.0	36.0	38.0	45.0	45.0	44.0	500.0	38.0	27.0
Songkh	-5.0	21.0	11.0	24.0	20.0	15.0	16.0	33.0	500.0	18.0
Cocos	31.0	38.0	34.0	22.0	44.0	28.0	14.0	18.0	15.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	60.0	67.0	64.0	60.0	50.0	44.0	38.0	25.0	45.0
Darwin	58.0	500.0	66.0	63.0	69.0	64.0	51.0	48.0	32.0	50.0
ASprin	65.0	66.0	500.0	68.0	65.0	55.0	44.0	39.0	27.0	48.0
TownsV	62.0	62.0	67.0	500.0	59.0	62.0	50.0	44.0	33.0	41.0
Derby	59.0	69.0	66.0	60.0	500.0	55.0	48.0	45.0	32.0	54.0
Jayapu	50.0	68.0	59.0	66.0	59.0	500.0	59.0	49.0	38.0	44.0
Guam	43.0	57.0	52.0	59.0	53.0	62.0	500.0	51.0	37.0	38.0
Manila	38.0	56.0	49.0	48.0	54.0	54.0	52.0	500.0	52.0	38.0
Songkh	22.0	35.0	35.0	37.0	33.0	34.0	34.0	49.0	500.0	37.0
Cocos	43.0	51.0	48.0	42.0	54.0	40.0	32.0	34.0	35.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
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Adelad	500.0	63.0	69.0	66.0	63.0	53.0	49.0	44.0	34.0	48.0
Darwin	61.0	500.0	68.0	66.0	70.0	66.0	57.0	54.0	39.0	54.0
ASprin	67.0	68.0	500.0	70.0	67.0	60.0	50.0	45.0	38.0	52.0
TownsV	64.0	66.0	69.0	500.0	63.0	65.0	55.0	49.0	39.0	47.0
Derby	62.0	71.0	68.0	64.0	500.0	60.0	53.0	51.0	40.0	58.0
Jayapu	54.0	70.0	63.0	69.0	63.0	500.0	62.0	54.0	45.0	49.0
Guam	51.0	62.0	58.0	63.0	59.0	64.0	500.0	56.0	44.0	45.0
Manila	47.0	61.0	55.0	56.0	60.0	58.0	58.0	500.0	54.0	43.0
Songkh	35.0	40.0	45.0	36.0	39.0	44.0	43.0	52.0	500.0	45.0
Cocos	50.0	58.0	55.0	51.0	60.0	48.0	42.0	42.0	45.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	64.0	52.0	68.0	65.0	56.0	53.0	48.0	39.0	51.0
Darwin	63.0	500.0	70.0	68.0	71.0	68.0	60.0	57.0	44.0	57.0
ASprin	51.0	70.0	500.0	63.0	69.0	63.0	56.0	50.0	44.0	54.0
TownsV	67.0	67.0	62.0	500.0	65.0	66.0	60.0	54.0	44.0	51.0
Derby	64.0	72.0	70.0	66.0	500.0	63.0	58.0	56.0	45.0	61.0
Jayapu	57.0	71.0	66.0	70.0	66.0	500.0	64.0	57.0	48.0	53.0
Guam	55.0	65.0	61.0	65.0	62.0	65.0	500.0	58.0	48.0	50.0
Manila	52.0	64.0	59.0	59.0	63.0	61.0	61.0	500.0	57.0	49.0
Songkh	42.0	46.0	51.0	44.0	43.0	50.0	50.0	56.0	500.0	52.0
Cocos	54.0	62.0	59.0	56.0	65.0	54.0	49.0	48.0	51.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	66.0	7.0	53.0	66.0	58.0	57.0	52.0	43.0	54.0
Darwin	65.0	500.0	63.0	69.0	60.0	69.0	64.0	60.0	47.0	59.0
ASprin	7.0	63.0	500.0	47.0	62.0	65.0	60.0	55.0	49.0	57.0
TownsV	52.0	69.0	46.0	500.0	66.0	67.0	62.0	56.0	48.0	54.0
Derby	66.0	60.0	62.0	67.0	500.0	66.0	61.0	59.0	49.0	63.0
Jayapu	58.0	70.0	67.0	68.0	67.0	500.0	66.0	58.0	50.0	58.0
Guam	57.0	66.0	62.0	65.0	63.0	67.0	500.0	59.0	51.0	53.0
Manila	55.0	65.0	61.0	61.0	65.0	62.0	63.0	500.0	60.0	53.0
Songkh	46.0	50.0	55.0	48.0	49.0	53.0	55.0	60.0	500.0	57.0
Cocos	57.0	63.0	60.0	57.0	66.0	59.0	53.0	52.0	55.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	66.0	-25.0	15.0	66.0	27.0	58.0	54.0	45.0	56.0
Darwin	66.0	500.0	51.0	69.0	43.0	71.0	65.0	62.0	51.0	60.0
ASprin	-25.0	51.0	500.0	19.0	49.0	67.0	62.0	57.0	53.0	58.0
TownsV	14.0	69.0	19.0	500.0	67.0	69.0	62.0	58.0	51.0	56.0
Derby	66.0	43.0	49.0	67.0	500.0	66.0	62.0	62.0	52.0	64.0
Jayapu	35.0	71.0	67.0	69.0	67.0	500.0	59.0	61.0	52.0	60.0

Guam	57.0	66.0	63.0	63.0	62.0	60.0	500.0	62.0	53.0	54.0
Manila	56.0	65.0	62.0	60.0	66.0	64.0	65.0	500.0	64.0	56.0
Songkh	47.0	52.0	57.0	51.0	51.0	54.0	56.0	63.0	500.0	61.0
Cocos	57.0	62.0	60.0	57.0	65.0	60.0	54.0	54.0	59.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	51.0	-25.0	-37.0	43.0	64.0	57.0	56.0	53.0	33.0
Darwin	54.0	500.0	30.0	56.0	20.0	71.0	65.0	63.0	38.0	61.0
ASprin	-25.0	30.0	500.0	-11.0	27.0	68.0	61.0	59.0	56.0	44.0
TownsV	-37.0	56.0	-11.0	500.0	65.0	69.0	66.0	59.0	53.0	57.0
Derby	43.0	20.0	27.0	65.0	500.0	68.0	62.0	64.0	55.0	65.0
Jayapu	63.0	71.0	68.0	69.0	68.0	500.0	50.0	62.0	39.0	61.0
Guam	56.0	65.0	61.0	67.0	61.0	50.0	500.0	64.0	55.0	54.0
Manila	56.0	65.0	61.0	59.0	66.0	64.0	65.0	500.0	66.0	58.0
Songkh	53.0	39.0	58.0	51.0	53.0	41.0	57.0	66.0	500.0	62.0
Cocos	34.0	62.0	43.0	57.0	66.0	62.0	54.0	57.0	61.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	22.0	-24.0	-55.0	7.0	61.0	28.0	49.0	51.0	-14.0
Darwin	40.0	500.0	3.0	42.0	-3.0	59.0	65.0	65.0	24.0	37.0
ASprin	-24.0	3.0	500.0	-23.0	-1.0	67.0	61.0	60.0	57.0	24.0
TownsV	-55.0	42.0	-23.0	500.0	50.0	60.0	65.0	58.0	39.0	38.0
Derby	7.0	-3.0	-1.0	50.0	500.0	68.0	60.0	64.0	35.0	66.0
Jayapu	60.0	59.0	67.0	60.0	68.0	500.0	35.0	54.0	24.0	60.0
Guam	34.0	65.0	61.0	65.0	58.0	35.0	500.0	56.0	40.0	40.0
Manila	48.0	65.0	61.0	57.0	65.0	55.0	57.0	500.0	57.0	61.0
Songkh	49.0	24.0	58.0	38.0	38.0	24.0	39.0	57.0	500.0	64.0
Cocos	-9.0	32.0	11.0	38.0	66.0	60.0	39.0	62.0	64.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-21.0	-24.0	-55.0	-39.0	43.0	-18.0	9.0	21.0	-93.0
Darwin	17.0	500.0	-23.0	21.0	-7.0	49.0	64.0	64.0	59.0	64.0
ASprin	-24.0	-23.0	500.0	-22.0	-28.0	54.0	55.0	59.0	57.0	-7.0
TownsV	-55.0	21.0	-22.0	500.0	34.0	51.0	65.0	37.0	23.0	18.0
Derby	-39.0	-7.0	-28.0	34.0	500.0	67.0	38.0	65.0	9.0	66.0
Jayapu	48.0	49.0	54.0	51.0	67.0	500.0	17.0	45.0	56.0	59.0
Guam	9.0	64.0	55.0	55.0	40.0	17.0	500.0	49.0	25.0	24.0
Manila	23.0	64.0	59.0	39.0	65.0	46.0	49.0	500.0	47.0	62.0
Songkh	27.0	58.0	57.0	25.0	23.0	55.0	19.0	47.0	500.0	64.0
Cocos	-78.0	65.0	-46.0	18.0	66.0	61.0	24.0	63.0	65.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	44.0	59.0	54.0	49.0	27.0	17.0	11.0	11.0	35.0
Darwin	42.0	500.0	57.0	50.0	61.0	47.0	18.0	16.0	17.0	34.0
ASprin	57.0	57.0	500.0	59.0	57.0	36.0	18.0	11.0	0.0	37.0
TownsV	52.0	50.0	59.0	500.0	46.0	43.0	17.0	7.0	-4.0	24.0
Derby	47.0	61.0	57.0	45.0	500.0	36.0	12.0	14.0	8.0	42.0
Jayapu	27.0	55.0	43.0	52.0	44.0	500.0	38.0	23.0	20.0	30.0
Guam	17.0	40.0	27.0	35.0	36.0	46.0	500.0	21.0	9.0	15.0
Manila	14.0	35.0	24.0	23.0	32.0	37.0	24.0	500.0	39.0	34.0
Songkh	6.0	27.0	8.0	7.0	17.0	21.0	4.0	30.0	500.0	35.0
Cocos	29.0	33.0	32.0	19.0	40.0	21.0	-3.0	13.0	23.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	55.0	63.0	60.0	56.0	41.0	35.0	31.0	27.0	45.0
Darwin	53.0	500.0	63.0	60.0	66.0	58.0	40.0	39.0	30.0	53.0
ASprin	62.0	63.0	500.0	64.0	62.0	51.0	38.0	35.0	33.0	50.0
TownsV	58.0	59.0	64.0	500.0	56.0	56.0	40.0	35.0	29.0	44.0
Derby	55.0	66.0	62.0	57.0	500.0	51.0	37.0	39.0	32.0	56.0
Jayapu	44.0	64.0	55.0	62.0	56.0	500.0	51.0	41.0	39.0	47.0
Guam	39.0	55.0	47.0	55.0	52.0	58.0	500.0	42.0	33.0	42.0
Manila	38.0	53.0	46.0	47.0	52.0	52.0	44.0	500.0	45.0	47.0
Songkh	26.0	38.0	36.0	34.0	39.0	37.0	31.0	40.0	500.0	46.0
Cocos	43.0	53.0	49.0	44.0	57.0	40.0	27.0	31.0	38.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	60.0	61.0	64.0	60.0	47.0	44.0	41.0	36.0	50.0
Darwin	59.0	500.0	66.0	65.0	69.0	63.0	51.0	50.0	41.0	59.0
ASprin	60.0	66.0	500.0	68.0	66.0	57.0	48.0	45.0	43.0	54.0
TownsV	63.0	64.0	67.0	500.0	61.0	61.0	51.0	45.0	41.0	51.0
Derby	59.0	69.0	66.0	62.0	500.0	58.0	48.0	49.0	43.0	62.0
Jayapu	51.0	69.0	62.0	67.0	63.0	500.0	58.0	51.0	47.0	54.0
Guam	49.0	63.0	56.0	62.0	59.0	62.0	500.0	52.0	44.0	51.0
Manila	48.0	61.0	56.0	57.0	60.0	58.0	54.0	500.0	53.0	54.0
Songkh	40.0	49.0	49.0	48.0	50.0	48.0	43.0	50.0	500.0	55.0
Cocos	50.0	60.0	56.0	52.0	63.0	50.0	41.0	43.0	48.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	63.0	38.0	59.0	63.0	51.0	51.0	47.0	47.0	52.0
Darwin	62.0	500.0	63.0	67.0	61.0	67.0	59.0	57.0	48.0	61.0

ASprin	38.0	63.0	500.0	59.0	61.0	62.0	55.0	52.0	49.0	55.0
TownsV	58.0	67.0	58.0	500.0	64.0	65.0	58.0	53.0	48.0	54.0
Derby	62.0	62.0	61.0	65.0	500.0	62.0	57.0	56.0	49.0	64.0
Jayapu	54.0	71.0	66.0	69.0	66.0	500.0	63.0	57.0	52.0	59.0
Guam	53.0	66.0	61.0	65.0	63.0	65.0	500.0	57.0	51.0	56.0
Manila	53.0	66.0	60.0	62.0	64.0	62.0	60.0	500.0	58.0	58.0
Songkh	50.0	54.0	55.0	54.0	56.0	54.0	52.0	56.0	500.0	61.0
Cocos	52.0	62.0	57.0	56.0	65.0	57.0	50.0	50.0	55.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	57.0	-2.0	38.0	50.0	59.0	54.0	50.0	49.0	19.0
Darwin	56.0	500.0	55.0	67.0	36.0	68.0	65.0	62.0	52.0	60.0
ASprin	-2.0	55.0	500.0	43.0	50.0	64.0	60.0	56.0	53.0	42.0
TownsV	38.0	67.0	43.0	500.0	65.0	66.0	62.0	58.0	53.0	54.0
Derby	53.0	36.0	50.0	65.0	500.0	65.0	62.0	60.0	54.0	64.0
Jayapu	61.0	70.0	66.0	68.0	67.0	500.0	66.0	61.0	55.0	61.0
Guam	54.0	68.0	63.0	65.0	65.0	67.0	500.0	61.0	55.0	59.0
Manila	53.0	67.0	62.0	64.0	65.0	65.0	64.0	500.0	62.0	61.0
Songkh	50.0	57.0	58.0	57.0	58.0	57.0	57.0	61.0	500.0	63.0
Cocos	17.0	61.0	42.0	55.0	64.0	61.0	56.0	56.0	60.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	47.0	-20.0	0.0	24.0	59.0	52.0	48.0	37.0	-40.0
Darwin	47.0	500.0	40.0	57.0	0.0	70.0	66.0	64.0	55.0	45.0
ASprin	-20.0	40.0	500.0	19.0	31.0	66.0	61.0	59.0	56.0	23.0
TownsV	0.0	57.0	19.0	500.0	55.0	68.0	63.0	60.0	56.0	38.0
Derby	39.0	0.0	31.0	55.0	500.0	66.0	63.0	62.0	57.0	65.0
Jayapu	60.0	71.0	67.0	69.0	67.0	500.0	68.0	62.0	56.0	61.0
Guam	51.0	67.0	63.0	64.0	64.0	68.0	500.0	63.0	57.0	59.0
Manila	49.0	67.0	62.0	64.0	65.0	65.0	65.0	500.0	66.0	61.0
Songkh	37.0	58.0	59.0	58.0	59.0	58.0	58.0	65.0	500.0	65.0
Cocos	-53.0	46.0	5.0	38.0	65.0	61.0	58.0	58.0	63.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	31.0	-20.0	-41.0	-16.0	51.0	22.0	18.0	6.0	-999.0
Darwin	31.0	500.0	18.0	46.0	-7.0	62.0	66.0	65.0	56.0	63.0
ASprin	-20.0	18.0	500.0	-6.0	6.0	59.0	61.0	59.0	56.0	49.0
TownsV	-41.0	46.0	-6.0	500.0	45.0	60.0	63.0	61.0	58.0	21.0
Derby	17.0	-7.0	6.0	45.0	500.0	67.0	62.0	65.0	59.0	56.0
Jayapu	48.0	63.0	59.0	60.0	67.0	500.0	60.0	64.0	55.0	60.0
Guam	16.0	67.0	61.0	63.0	62.0	61.0	500.0	65.0	57.0	59.0
Manila	12.0	67.0	61.0	63.0	67.0	66.0	66.0	500.0	66.0	61.0

Songkh	-4.0	57.0	58.0	59.0	60.0	55.0	58.0	66.0	500.0	66.0
Cocos	-999.0	64.0	46.0	21.0	56.0	60.0	58.0	59.0	65.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	8.0	-19.0	-48.0	-58.0	42.0	-16.0	-22.0	-43.0	-999.0
Darwin	8.0	500.0	-5.0	30.0	-6.0	50.0	66.0	65.0	53.0	60.0
ASprin	-19.0	-5.0	500.0	-19.0	-20.0	45.0	60.0	58.0	53.0	39.0
TownsV	-48.0	30.0	-19.0	500.0	30.0	46.0	59.0	61.0	57.0	-6.0
Derby	-11.0	-6.0	-20.0	30.0	500.0	65.0	62.0	66.0	59.0	43.0
Jayapu	26.0	50.0	45.0	46.0	65.0	500.0	52.0	64.0	35.0	57.0
Guam	-38.0	66.0	60.0	58.0	62.0	52.0	500.0	59.0	42.0	57.0
Manila	-45.0	66.0	60.0	61.0	66.0	65.0	60.0	500.0	57.0	60.0
Songkh	-73.0	54.0	56.0	58.0	59.0	34.0	41.0	56.0	500.0	66.0
Cocos	-999.0	60.0	26.0	-6.0	43.0	58.0	57.0	59.0	66.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-19.0	-19.0	-48.0	-71.0	29.0	-72.0	-81.0	-999.0	-999.0
Darwin	-19.0	500.0	-26.0	11.0	-6.0	30.0	66.0	66.0	33.0	46.0
ASprin	-19.0	-26.0	500.0	-18.0	-31.0	21.0	37.0	43.0	37.0	24.0
TownsV	-48.0	11.0	-18.0	500.0	10.0	23.0	65.0	59.0	56.0	-42.0
Derby	-40.0	-6.0	-31.0	10.0	500.0	50.0	45.0	65.0	58.0	21.0
Jayapu	-9.0	30.0	21.0	23.0	50.0	500.0	39.0	55.0	16.0	32.0
Guam	-999.0	66.0	37.0	65.0	47.0	40.0	500.0	53.0	27.0	42.0
Manila	-999.0	66.0	41.0	59.0	65.0	56.0	54.0	500.0	44.0	45.0
Songkh	-999.0	33.0	34.0	56.0	58.0	12.0	21.0	44.0	500.0	66.0
Cocos	-999.0	47.0	-6.0	-42.0	21.0	33.0	42.0	45.0	66.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-46.0	-18.0	-48.0	-71.0	11.0	-999.0	-999.0	-999.0	-999.0
Darwin	-46.0	500.0	-26.0	-10.0	-5.0	4.0	64.0	65.0	14.0	28.0
ASprin	-18.0	-26.0	500.0	-18.0	-30.0	-11.0	11.0	33.0	25.0	5.0
TownsV	-48.0	-10.0	-18.0	500.0	-14.0	-7.0	65.0	35.0	38.0	-87.0
Derby	-68.0	-5.0	-30.0	-14.0	500.0	32.0	26.0	65.0	38.0	-10.0
Jayapu	-51.0	4.0	-11.0	-7.0	32.0	500.0	22.0	47.0	51.0	1.0
Guam	-999.0	65.0	11.0	64.0	34.0	22.0	500.0	44.0	57.0	29.0
Manila	-999.0	64.0	18.0	36.0	65.0	48.0	44.0	500.0	25.0	32.0
Songkh	-999.0	14.0	8.0	38.0	39.0	51.0	57.0	25.0	500.0	65.0
Cocos	-999.0	32.0	-46.0	-87.0	-10.0	7.0	29.0	32.0	66.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 3



TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	46.0	58.0	55.0	48.0	29.0	19.0	9.0	12.0	31.0
Darwin	43.0	500.0	58.0	52.0	62.0	49.0	22.0	16.0	9.0	41.0
ASprin	57.0	58.0	500.0	59.0	57.0	38.0	21.0	13.0	8.0	37.0
TownsV	54.0	52.0	59.0	500.0	45.0	48.0	25.0	5.0	5.0	26.0
Derby	47.0	62.0	57.0	45.0	500.0	38.0	21.0	12.0	11.0	47.0
Jayapu	30.0	55.0	43.0	55.0	44.0	500.0	44.0	24.0	7.0	27.0
Guam	22.0	32.0	27.0	36.0	25.0	48.0	500.0	22.0	12.0	9.0
Manila	23.0	42.0	25.0	22.0	42.0	38.0	32.0	500.0	31.0	29.0
Songkh	23.0	21.0	12.0	19.0	23.0	22.0	13.0	23.0	500.0	30.0
Cocos	25.0	41.0	34.0	21.0	46.0	23.0	0.0	4.0	18.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	55.0	64.0	59.0	57.0	41.0	36.0	31.0	28.0	46.0
Darwin	54.0	500.0	64.0	60.0	67.0	60.0	43.0	37.0	30.0	54.0
ASprin	63.0	64.0	500.0	64.0	63.0	52.0	39.0	34.0	33.0	51.0
TownsV	59.0	60.0	64.0	500.0	56.0	57.0	41.0	32.0	28.0	45.0
Derby	55.0	67.0	63.0	56.0	500.0	52.0	41.0	36.0	33.0	58.0
Jayapu	44.0	65.0	56.0	62.0	57.0	500.0	53.0	42.0	34.0	49.0
Guam	38.0	51.0	45.0	50.0	48.0	57.0	500.0	41.0	35.0	35.0
Manila	41.0	57.0	46.0	46.0	56.0	52.0	47.0	500.0	44.0	49.0
Songkh	34.0	37.0	34.0	32.0	36.0	43.0	36.0	39.0	500.0	48.0
Cocos	43.0	54.0	50.0	44.0	59.0	46.0	31.0	31.0	38.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	61.0	67.0	64.0	62.0	48.0	45.0	41.0	42.0	52.0
Darwin	60.0	500.0	67.0	65.0	62.0	64.0	53.0	50.0	43.0	58.0
ASprin	66.0	67.0	500.0	63.0	67.0	58.0	48.0	44.0	43.0	55.0
TownsV	64.0	65.0	63.0	500.0	62.0	61.0	49.0	43.0	42.0	52.0
Derby	61.0	62.0	66.0	61.0	500.0	59.0	50.0	48.0	45.0	62.0
Jayapu	50.0	68.0	61.0	65.0	63.0	500.0	59.0	51.0	46.0	57.0
Guam	49.0	61.0	54.0	56.0	58.0	63.0	500.0	52.0	47.0	48.0
Manila	49.0	64.0	55.0	55.0	62.0	60.0	57.0	500.0	54.0	57.0
Songkh	47.0	50.0	48.0	47.0	49.0	52.0	47.0	50.0	500.0	60.0
Cocos	50.0	59.0	55.0	52.0	63.0	55.0	43.0	44.0	51.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	63.0	51.0	58.0	64.0	57.0	48.0	46.0	48.0	50.0
Darwin	62.0	500.0	58.0	60.0	40.0	67.0	59.0	58.0	52.0	53.0
ASprin	51.0	58.0	500.0	52.0	59.0	62.0	52.0	50.0	49.0	51.0
TownsV	58.0	60.0	52.0	500.0	63.0	59.0	52.0	50.0	50.0	52.0

Derby	63.0	40.0	59.0	63.0	500.0	63.0	56.0	55.0	53.0	63.0
Jayapu	58.0	69.0	64.0	60.0	64.0	500.0	63.0	59.0	54.0	58.0
Guam	49.0	63.0	55.0	56.0	59.0	66.0	500.0	59.0	55.0	54.0
Manila	51.0	66.0	57.0	57.0	64.0	65.0	62.0	500.0	61.0	61.0
Songkh	50.0	55.0	52.0	52.0	55.0	58.0	55.0	58.0	500.0	64.0
Cocos	49.0	55.0	51.0	54.0	63.0	58.0	52.0	53.0	59.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	56.0	23.0	40.0	55.0	57.0	28.0	44.0	47.0	21.0
Darwin	56.0	500.0	42.0	50.0	5.0	52.0	62.0	63.0	56.0	60.0
ASprin	22.0	42.0	500.0	31.0	45.0	52.0	39.0	52.0	49.0	20.0
TownsV	40.0	50.0	31.0	500.0	55.0	43.0	59.0	53.0	52.0	34.0
Derby	56.0	5.0	45.0	55.0	500.0	63.0	57.0	58.0	56.0	55.0
Jayapu	57.0	52.0	53.0	44.0	63.0	500.0	66.0	63.0	59.0	55.0
Guam	27.0	64.0	41.0	60.0	58.0	67.0	500.0	64.0	59.0	56.0
Manila	45.0	67.0	56.0	56.0	62.0	66.0	65.0	500.0	65.0	61.0
Songkh	46.0	57.0	51.0	52.0	57.0	60.0	58.0	64.0	500.0	66.0
Cocos	21.0	61.0	20.0	28.0	54.0	57.0	56.0	59.0	64.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	47.0	-11.0	8.0	40.0	47.0	-10.0	15.0	24.0	-17.0
Darwin	47.0	500.0	18.0	31.0	-6.0	28.0	62.0	63.0	57.0	50.0
ASprin	-11.0	18.0	500.0	4.0	23.0	32.0	11.0	37.0	34.0	45.0
TownsV	8.0	31.0	4.0	500.0	44.0	14.0	57.0	38.0	45.0	11.0
Derby	46.0	-6.0	23.0	44.0	500.0	48.0	43.0	56.0	57.0	44.0
Jayapu	43.0	28.0	32.0	14.0	48.0	500.0	54.0	65.0	58.0	32.0
Guam	-14.0	63.0	11.0	58.0	44.0	54.0	500.0	65.0	59.0	55.0
Manila	13.0	65.0	35.0	39.0	57.0	65.0	66.0	500.0	67.0	61.0
Songkh	22.0	58.0	32.0	45.0	58.0	59.0	58.0	67.0	500.0	66.0
Cocos	-17.0	48.0	45.0	-36.0	28.0	26.0	56.0	60.0	65.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	32.0	-21.0	-28.0	14.0	34.0	-72.0	-29.0	-10.0	-73.0
Darwin	32.0	500.0	-7.0	6.0	-6.0	-4.0	61.0	64.0	55.0	34.0
ASprin	-21.0	-7.0	500.0	-19.0	-2.0	1.0	47.0	19.0	16.0	31.0
TownsV	-28.0	6.0	-19.0	500.0	26.0	-27.0	46.0	12.0	18.0	-25.0
Derby	31.0	-6.0	-2.0	26.0	500.0	27.0	21.0	63.0	50.0	26.0
Jayapu	21.0	-4.0	1.0	-27.0	27.0	500.0	34.0	65.0	56.0	-1.0
Guam	-80.0	62.0	47.0	46.0	21.0	34.0	500.0	66.0	57.0	53.0
Manila	-33.0	65.0	5.0	13.0	64.0	65.0	66.0	500.0	67.0	59.0
Songkh	-14.0	56.0	3.0	18.0	52.0	57.0	57.0	67.0	500.0	66.0
Cocos	-73.0	21.0	31.0	-999.0	-19.0	-30.0	55.0	59.0	66.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	11.0	-20.0	-49.0	-19.0	16.0	-999.0	-91.0	-64.0	-999.0
Darwin	11.0	500.0	-25.0	-21.0	-5.0	-34.0	52.0	63.0	34.0	8.0
ASprin	-20.0	-25.0	500.0	-18.0	-27.0	-36.0	32.0	-7.0	-11.0	9.0
TownsV	-49.0	-21.0	-18.0	500.0	3.0	-53.0	29.0	-29.0	-18.0	-72.0
Derby	9.0	-5.0	-27.0	3.0	500.0	-3.0	52.0	61.0	26.0	0.0
Jayapu	-11.0	-34.0	-36.0	-53.0	-3.0	500.0	4.0	57.0	34.0	-52.0
Guam	-999.0	51.0	32.0	29.0	52.0	4.0	500.0	57.0	38.0	33.0
Manila	-99.0	63.0	-42.0	-29.0	61.0	57.0	57.0	500.0	56.0	37.0
Songkh	-71.0	34.0	-44.0	-18.0	17.0	34.0	38.0	56.0	500.0	66.0
Cocos	-999.0	-23.0	9.0	-999.0	-71.0	-999.0	33.0	32.0	66.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-14.0	-20.0	-49.0	-53.0	-8.0	-999.0	-999.0	-999.0	-999.0
Darwin	-14.0	500.0	-25.0	-46.0	-5.0	-34.0	40.0	52.0	14.0	-26.0
ASprin	-20.0	-25.0	500.0	-18.0	-30.0	-71.0	9.0	-42.0	-47.0	-18.0
TownsV	-49.0	-46.0	-18.0	500.0	-23.0	-53.0	4.0	-85.0	-69.0	-999.0
Derby	-15.0	-5.0	-30.0	-23.0	500.0	-37.0	43.0	52.0	45.0	-29.0
Jayapu	-49.0	-34.0	-71.0	-53.0	-37.0	500.0	-29.0	46.0	7.0	-999.0
Guam	-999.0	36.0	9.0	4.0	43.0	-29.0	500.0	46.0	14.0	7.0
Manila	-999.0	52.0	-999.0	-85.0	51.0	46.0	46.0	500.0	43.0	16.0
Songkh	-999.0	14.0	-999.0	-69.0	44.0	7.0	16.0	43.0	500.0	65.0
Cocos	-999.0	-73.0	-18.0	-999.0	-88.0	-999.0	0.0	-2.0	66.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-39.0	-19.0	-48.0	-71.0	-35.0	-999.0	-999.0	-999.0	-999.0
Darwin	-39.0	500.0	-25.0	-48.0	-4.0	-34.0	23.0	39.0	-16.0	-62.0
ASprin	-19.0	-25.0	500.0	-17.0	-29.0	-71.0	-21.0	-83.0	-90.0	-49.0
TownsV	-48.0	-48.0	-17.0	500.0	-49.0	-53.0	-27.0	-999.0	-999.0	-999.0
Derby	-41.0	-4.0	-29.0	-49.0	500.0	-69.0	29.0	42.0	-37.0	-58.0
Jayapu	-86.0	-34.0	-71.0	-53.0	-69.0	500.0	-52.0	29.0	-34.0	-999.0
Guam	-999.0	13.0	-21.0	-27.0	28.0	-52.0	500.0	29.0	-22.0	-32.0
Manila	-999.0	39.0	-999.0	-999.0	39.0	29.0	29.0	500.0	24.0	57.0
Songkh	-999.0	-16.0	-999.0	-999.0	-89.0	-34.0	-18.0	24.0	500.0	64.0
Cocos	-999.0	-999.0	-49.0	-999.0	-88.0	-999.0	-52.0	57.0	65.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
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Adelad	500.0	12.0	47.0	32.0	22.0	-19.0	-999.0	-61.0	-55.0	13.0
Darwin	14.0	500.0	40.0	24.0	50.0	20.0	-62.0	-28.0	-34.0	20.0
ASprin	47.0	38.0	500.0	36.0	42.0	-15.0	-999.0	-64.0	-40.0	17.0
TownsV	31.0	22.0	36.0	500.0	2.0	5.0	-92.0	-999.0	-999.0	-17.0
Derby	24.0	51.0	44.0	5.0	500.0	-5.0	-87.0	-17.0	-19.0	37.0
Jayapu	-18.0	19.0	-15.0	6.0	-7.0	500.0	-10.0	-51.0	-71.0	-16.0
Guam	-999.0	-63.0	-999.0	-91.0	-89.0	-11.0	500.0	-67.0	-999.0	-66.0
Manila	-49.0	-17.0	-52.0	-88.0	-7.0	-40.0	-55.0	500.0	4.0	8.0
Songkh	-43.0	-23.0	-28.0	-87.0	-9.0	-60.0	-88.0	4.0	500.0	25.0
Cocos	15.0	24.0	21.0	-12.0	38.0	-9.0	-55.0	0.0	18.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	42.0	63.0	54.0	45.0	27.0	-12.0	5.0	3.0	38.0
Darwin	43.0	500.0	60.0	51.0	64.0	52.0	17.0	28.0	17.0	44.0
ASprin	63.0	59.0	500.0	60.0	58.0	34.0	2.0	13.0	11.0	40.0
TownsV	53.0	49.0	59.0	500.0	37.0	42.0	0.0	0.0	-3.0	25.0
Derby	47.0	65.0	61.0	41.0	500.0	39.0	15.0	29.0	23.0	51.0
Jayapu	27.0	52.0	34.0	44.0	37.0	500.0	36.0	17.0	3.0	28.0
Guam	-13.0	14.0	3.0	2.0	12.0	37.0	500.0	19.0	-1.0	3.0
Manila	14.0	34.0	19.0	5.0	36.0	27.0	27.0	500.0	39.0	35.0
Songkh	13.0	25.0	21.0	8.0	30.0	16.0	10.0	40.0	500.0	41.0
Cocos	39.0	46.0	43.0	31.0	51.0	32.0	10.0	30.0	37.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	55.0	65.0	62.0	58.0	42.0	22.0	28.0	29.0	44.0
Darwin	55.0	500.0	64.0	60.0	68.0	62.0	42.0	46.0	35.0	50.0
ASprin	65.0	63.0	500.0	65.0	63.0	46.0	32.0	35.0	31.0	47.0
TownsV	61.0	59.0	65.0	500.0	53.0	54.0	32.0	29.0	20.0	43.0
Derby	58.0	68.0	64.0	54.0	500.0	52.0	38.0	45.0	38.0	56.0
Jayapu	42.0	63.0	47.0	56.0	52.0	500.0	55.0	41.0	28.0	45.0
Guam	19.0	40.0	33.0	34.0	37.0	56.0	500.0	42.0	27.0	32.0
Manila	32.0	50.0	37.0	32.0	50.0	46.0	47.0	500.0	54.0	47.0
Songkh	37.0	40.0	38.0	29.0	43.0	37.0	33.0	54.0	500.0	55.0
Cocos	43.0	50.0	47.0	43.0	56.0	44.0	34.0	42.0	49.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	61.0	68.0	63.0	62.0	49.0	40.0	42.0	42.0	23.0
Darwin	61.0	500.0	67.0	62.0	55.0	65.0	52.0	55.0	46.0	56.0
ASprin	68.0	67.0	500.0	67.0	67.0	58.0	43.0	47.0	44.0	29.0
TownsV	63.0	62.0	67.0	500.0	60.0	62.0	45.0	44.0	39.0	47.0
Derby	61.0	55.0	67.0	60.0	500.0	59.0	48.0	51.0	47.0	51.0
Jayapu	49.0	66.0	59.0	63.0	60.0	500.0	64.0	52.0	44.0	51.0

Guam	37.0	51.0	44.0	47.0	50.0	64.0	500.0	54.0	42.0	40.0
Manila	41.0	57.0	48.0	45.0	53.0	55.0	56.0	500.0	60.0	51.0
Songkh	45.0	47.0	46.0	42.0	48.0	47.0	45.0	59.0	500.0	58.0
Cocos	22.0	56.0	29.0	42.0	49.0	46.0	41.0	47.0	55.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	63.0	56.0	66.0	64.0	54.0	48.0	49.0	48.0	-17.0
Darwin	63.0	500.0	70.0	65.0	10.0	67.0	59.0	60.0	52.0	47.0
ASprin	56.0	69.0	500.0	70.0	54.0	62.0	51.0	53.0	49.0	47.0
TownsV	66.0	65.0	70.0	500.0	64.0	65.0	53.0	52.0	47.0	-60.0
Derby	64.0	10.0	54.0	63.0	500.0	63.0	54.0	52.0	11.0	36.0
Jayapu	55.0	67.0	63.0	65.0	63.0	500.0	65.0	58.0	51.0	-14.0
Guam	46.0	59.0	52.0	54.0	54.0	66.0	500.0	59.0	49.0	29.0
Manila	47.0	61.0	52.0	51.0	54.0	60.0	60.0	500.0	64.0	16.0
Songkh	47.0	50.0	49.0	48.0	26.0	52.0	50.0	63.0	500.0	60.0
Cocos	-18.0	47.0	46.0	4.0	22.0	16.0	31.0	20.0	58.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	65.0	11.0	67.0	63.0	56.0	52.0	51.0	31.0	-79.0
Darwin	65.0	500.0	43.0	67.0	-9.0	69.0	62.0	61.0	11.0	25.0
ASprin	11.0	43.0	500.0	63.0	7.0	64.0	55.0	55.0	42.0	34.0
TownsV	67.0	67.0	63.0	500.0	65.0	65.0	57.0	55.0	50.0	-999.0
Derby	63.0	-9.0	7.0	65.0	500.0	64.0	55.0	60.0	-40.0	9.0
Jayapu	56.0	69.0	64.0	65.0	64.0	500.0	68.0	59.0	54.0	-999.0
Guam	52.0	61.0	56.0	58.0	55.0	69.0	500.0	61.0	53.0	-55.0
Manila	50.0	61.0	54.0	53.0	61.0	60.0	61.0	500.0	57.0	49.0
Songkh	32.0	23.0	41.0	49.0	-15.0	53.0	51.0	56.0	500.0	50.0
Cocos	-79.0	25.0	34.0	-61.0	-23.0	-38.0	1.0	49.0	50.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	65.0	-30.0	69.0	27.0	58.0	55.0	53.0	-27.0	-999.0
Darwin	65.0	500.0	-4.0	68.0	-9.0	56.0	62.0	63.0	-78.0	-11.0
ASprin	-30.0	-4.0	500.0	37.0	-37.0	66.0	56.0	28.0	-18.0	13.0
TownsV	69.0	68.0	37.0	500.0	66.0	67.0	57.0	56.0	46.0	-999.0
Derby	27.0	-9.0	-37.0	66.0	500.0	66.0	58.0	58.0	-999.0	-25.0
Jayapu	58.0	56.0	66.0	67.0	66.0	500.0	72.0	62.0	36.0	-999.0
Guam	55.0	61.0	56.0	57.0	58.0	72.0	500.0	64.0	28.0	-999.0
Manila	50.0	63.0	27.0	56.0	58.0	63.0	64.0	500.0	43.0	31.0
Songkh	0.0	-23.0	6.0	41.0	-81.0	38.0	30.0	42.0	500.0	30.0
Cocos	-999.0	-11.0	13.0	-999.0	-72.0	-999.0	-54.0	35.0	35.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	44.0	-30.0	46.0	-32.0	21.0	55.0	12.0	-999.0	-999.0
Darwin	44.0	500.0	-34.0	56.0	-8.0	32.0	63.0	52.0	-999.0	-54.0
ASprin	-30.0	-34.0	500.0	-6.0	-37.0	67.0	58.0	-29.0	-999.0	-15.0
TownsV	46.0	56.0	-6.0	500.0	56.0	68.0	60.0	33.0	-3.0	-999.0
Derby	-32.0	-8.0	-37.0	56.0	500.0	55.0	27.0	33.0	-999.0	-60.0
Jayapu	21.0	32.0	67.0	68.0	55.0	500.0	62.0	64.0	-14.0	-999.0
Guam	55.0	63.0	58.0	60.0	27.0	62.0	500.0	55.0	-13.0	-999.0
Manila	9.0	52.0	-37.0	33.0	34.0	64.0	55.0	500.0	19.0	-1.0
Songkh	-58.0	-91.0	-47.0	13.0	-999.0	13.0	1.0	19.0	500.0	-4.0
Cocos	-999.0	-54.0	-15.0	-999.0	-87.0	-999.0	-999.0	11.0	10.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	4.0	-29.0	10.0	-81.0	-42.0	56.0	-53.0	-999.0	-999.0
Darwin	4.0	500.0	-33.0	30.0	-8.0	-5.0	64.0	30.0	-999.0	-97.0
ASprin	-29.0	-33.0	500.0	-30.0	-36.0	67.0	40.0	-999.0	-999.0	-47.0
TownsV	10.0	30.0	-30.0	500.0	31.0	69.0	41.0	-10.0	-82.0	-999.0
Derby	-81.0	-8.0	-36.0	31.0	500.0	34.0	-24.0	-7.0	-999.0	-86.0
Jayapu	-42.0	-5.0	67.0	69.0	34.0	500.0	50.0	52.0	-999.0	-999.0
Guam	56.0	64.0	40.0	41.0	-24.0	50.0	500.0	35.0	-75.0	-999.0
Manila	-64.0	27.0	-999.0	-16.0	-6.0	52.0	35.0	500.0	-12.0	-44.0
Songkh	-999.0	-999.0	-999.0	-27.0	-999.0	-27.0	-44.0	-12.0	500.0	-46.0
Cocos	-999.0	-97.0	-47.0	-999.0	-86.0	-999.0	-999.0	-22.0	-23.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-49.0	-29.0	-37.0	-81.0	62.0	36.0	-999.0	-999.0	-999.0
Darwin	-49.0	500.0	-33.0	-11.0	-7.0	-41.0	62.0	-8.0	-999.0	-999.0
ASprin	-29.0	-33.0	500.0	-29.0	-36.0	44.0	11.0	-999.0	-999.0	-79.0
TownsV	-37.0	-11.0	-29.0	500.0	-13.0	52.0	11.0	-80.0	-999.0	-999.0
Derby	-81.0	-7.0	-36.0	-13.0	500.0	-1.0	55.0	-59.0	-999.0	-85.0
Jayapu	62.0	-41.0	44.0	52.0	-1.0	500.0	36.0	30.0	-999.0	-999.0
Guam	37.0	61.0	11.0	11.0	55.0	36.0	500.0	0.0	-999.0	-999.0
Manila	-999.0	-15.0	-999.0	-95.0	-59.0	30.0	0.0	500.0	-44.0	-87.0
Songkh	-999.0	-999.0	-999.0	-85.0	-999.0	-82.0	-999.0	-44.0	500.0	-88.0
Cocos	-999.0	-999.0	-79.0	-999.0	-86.0	-999.0	-999.0	-58.0	-59.0	500.0

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 6  
 Sunspot Number = 150.00  
 Required SNR (dB-Hz) for comm = 20.0

Time-of-day (UT) = 2

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			23	1234	123459	123459	123456789	123456789	13456789	1345789
1 Darwin			245	0234579	02345679	023456789	023456789	023456789	02356789	0356789
2 ASprin			0134	0134	013459	013456789	013456789	013456789	1456789	456789
3 Townsv			02	01245	012456	012456789	012456789	012456789	01456789	01456789
4 Derby			12	01239	012356789	012356789	012356789	012356789	02356789	02356789
5 Jayapu			1	13467	0123467	012346789	012346789	012346789	012346789	12346789
6 Guam				57	13578	12345789	012345789	01234579	01234579	01234589
7 Manila			8	1568	145689	12345689	012345689	012345689	012345689	01234589
8 Songkh			7	79	5679	145679	012345679	012345679	0123479	012345679
9 Cocos			8	148	012478	012345678	012345678	012345678	012345678	012345678

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 6

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad		23	12345	12345	1234569	12345679	12345679	123456789	1346789	1456789
1 Darwin		234	02345	0234567	02345679	023456789	023456789	02345679	02356789	0356789
2 ASprin		0134	01345	013456	01345679	013456789	013456789	013456789	1456789	579
3 Townsv		0125	012456	012456	0124567	012456789	012456789	012456789	01456789	14569
4 Derby		12	0123	0123569	01235679	012356789	012356789	012356789	0235679	035679
5 Jayapu		36	01236	0123467	0123467	012346789	012346789	012346789	01234679	012346789
6 Guam		5	35	12357	0123457	012345789	012345789	012345789	012345789	0123457
7 Manila				14568	1234568	012345689	012345689	012345689	012345689	01245689
8 Songkh				7	67	15679	012345679	02345679	0123679	01579
9 Cocos				4	0124	012345678	012345678	012345678	012345678	01234578

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	12345	12345679	12345679	123456789	123456789	13456789	1456789	1456789	15678	58
1 Darwin	023456	02345679	02345679	023456789	023456789	023456789	023456789	023456789	0356789	356789
2 ASprin	01345	01345679	01345679	013456789	013456789	13456789	1456789	1456789	56789	5678
3 Townsv	012456	01245679	01245679	012456789	012456789	012456789	1456789	1456789	1456789	145678
4 Derby	01235	01235679	01235679	012356789	012356789	012356789	012356789	012356789	356789	35679
5 Jayapu	012346	012346789	012346789	012346789	012346789	012346789	012346789	012346789	012346789	01234789
6 Guam	012345	012345789	012345789	012345789	012345789	012345789	012345789	012345789	012345789	1234789
7 Manila	156	012345689	012345689	012345689	012345689	012345689	012345689	012345689	012345689	012345689
8 Songkh		1347	012345679	012345679	012345679	012345679	012345679	012345679	012345679	01234579



9 Cocos 012345 012345678 012345678 012345678 012345678 012345678 012345678 012345678 145678

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	123459	123456789	123456789	123456789	1345678	145678	156	5	5	
1 Darwin	023459	023456789	023456789	023456789	023456789	02356789	0356789	356789	56789	679
2 ASprin	013459	013456789	013456789	013456789	13456789	1456789	56789	56789	56789	78
3 Townsv	012459	012456789	012456789	012456789	012456789	1456789	1456789	145678	5678	678
4 Derby	012359	012356789	012356789	012356789	012356789	02356789	356789	356789	56789	5678
5 Jayapu	012346789	012346789	012346789	012346789	012346789	012346789	012346789	012346789	1234679	4678
6 Guam	123457	012345789	012345789	012345789	012345789	012345789	12345789	12345789	12345789	1345789
7 Manila	12345689	012345689	012345689	012345689	012345689	012345689	12345689	12345689	12345689	1345689
8 Songkh	1579	012345679	012345679	012345679	012345679	012345679	12345679	12345679	1234679	345679
9 Cocos	012458	012345678	012345678	012345678	12345678	1345678	12345678	1245678	145678	1678

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9



For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	234	123459	123456789	123456789	12345678	1345678	134567	1356	6	56
1 Darwin	23459	0234579	023456789	023456789	02356789	0235679	03567	03567	367	6
2 ASprin	0134	013459	013456789	013456789	013456789	1356789	3567	56	56	5
3 Townsv	012	012459	012456789	012456789	01245678	01245678	01245678	014567	1456	5
4 Derby	0129	01235789	012356789	012356789	0235679	03567	03567	3567	35	6
5 Jayapu		0123469	012346789	012346789	01234678	01234678	01234678	0123467	23467	02367
6 Guam	5		12345789	012345789	012345789	01234578	01234578	0123457	012357	0145
7 Manila		145689	012345689	012345689	01234568	012345689	012345689	13456	156	5
8 Songkh	9	12479	012345679	012345679	012345679	01235679	35679			
9 Cocos	124	01234578	012345678	012345678	124678	1278	78			

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 6  
 Sunspot Number = 150.00  
 Required SNR (dB-Hz) for comm = 40.0

Time-of-day (UT) = 2

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			2	23	234	1234	123459	134579	13456789	146789
1 Darwin			4	245	2345	02345679	023456789	023456789	02356789	03679
2 ASprin			0	0134	0134	013459	013459	13456789	1456789	56789
3 Townsv				02	0125	01245	0124567	012456789	01456789	145689
4 Derby			1	12	0129	0123579	012356789	012356789	02356789	035789
5 Jayapu				16	136	123467	01234679	012346789	01234679	2346789
6 Guam				5	57	157	134578	123457	0123459	012358
7 Manila				8	68	145689	1245689	01245689	01234589	012459
8 Songkh				7	79	79	5679	14579	012479	023469
9 Cocos					48	12478	0124578	012345678	012345678	01234578

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	8	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	8	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	7	9	9	9	9	9	9	9	9	9
7 Manila	8	9	9	9	9	9	9	9	9	9
8 Songkh	6	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 6

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad		23	23	1234	12345	123456	1234569	1345679	134679	1456789
1 Darwin			2345	02345	023456	02345679	02345679	0235679	0356789	03678
2 ASprin		03	0134	01345	013456	013456	01345679	145679	456789	59
3 Townsv		02	0125	012456	012456	0124567	0124567	01456789	014569	14569
4 Derby			12	0123	01235	01235679	01235679	02356789	023579	035679
5 Jayapu			136	1236	0123467	0123467	012346789	01234679	1234679	02346789
6 Guam			5	35	1357	0123457	0123457	01234578	012357	013457
7 Manila					568	14568	1234568	012345689	0124569	014569
8 Songkh					7	7	79	679	19	0159
9 Cocos					14	14	012458	012345678	01234578	0234578

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	7	9	9	9	9	9	9	9	9	9
1 Darwin	8	9	9	9	9	9	9	9	9	9
2 ASprin	8	9	9	9	9	9	9	9	9	9
3 Townsv	8	9	9	9	9	9	9	9	9	9
4 Derby	8	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	8	8	8	8	8	8	8	8	8	8
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	4	6	6	6	6	6	6	6	6	6
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	1234	12345	1234569	12345679	12345679	13456789	146789	145678	578	5
1 Darwin	2345	023456	02345679	02345679	02345679	023456789	023456789	035679	03567	56789
2 ASprin	0134	01345	0134569	01345679	01345679	13456789	1456789	56789	5678	5678
3 Townsv	0125	012456	01245679	01245679	01245679	012456789	1456789	1456789	14567	56
4 Derby	012	012359	01235679	01235679	012356789	012356789	012356789	0356789	35679	579
5 Jayapu	1236	0123467	01234679	01234679	012346789	012346789	12346789	01234679	0123479	01234789
6 Guam	5	123457	0123457	012345789	012345789	012345789	012345789	012345789	1234789	12347
7 Manila		1456	1234568	012345689	012345689	012345689	012345689	012345689	012345689	1245689
8 Songkh			7	125679	012345679	012345679	012345679	02345679	0279	12579

Step 3 Results for: Month = June, Sunspot # = 160, Required SNR = 40 dB-Hz,

40JUN160.OUT

C-3b-2

9 Cocos 4 012345 012345678 012345678 012345678 012345678 12345678 4578 14578

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	8	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	1234	123459	12345679	13456789	145678	1567	5	5	679	67
1 Darwin	02345	0234569	023456789	023456789	02356789	02356789	356789	56789	7	6
2 ASprin	0134	013459	013456789	13456789	13456789	15678	56789	5678	678	7
3 Townsv	01245	0124569	012456789	012456789	12456789	145678	145678	5678	5678	7
4 Derby	01239	012359	012356789	012356789	02356789	356789	356789	56789	5678	7
5 Jayapu	1234	01234679	012346789	012346789	012346789	012346789	012346789	1234679	47	78
6 Guam	15	1234579	012345789	012345789	012345789	012345789	12345789	12345789	134579	1378
7 Manila		12345689	012345689	012345689	012345689	012345689	12345689	12345689	12345689	1456
8 Songkh		79	012345679	012345679	012345679	12345679	12345679	1234679	3479	569
9 Cocos	4	012345	012345678	012345678	12345678	145678	1245678	145678	1678	8

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	8	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9



For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	2	1234	123459	12345678	12345678	134567	13567	136	6	5
1 Darwin	24	023459	02345679	023456789	02356789	023567	03567	0367	6	6
2 ASprin	04	01349	013459	01345678	013456789	135678	56	56	56	5
3 Townsv		0125	012459	01245679	01245678	01245678	0145678	01456	56	5
4 Derby	12	01239	0123579	012356789	023567	03567	3567	35		6
5 Jayapu		13	01234679	012346789	01234678	01234678	0123467	23467	2367	023
6 Guam			157	12345789	01234578	01234578	0123457	012357	01235	14
7 Manila			145689	012345689	01234568	012345689	0134568	156	5	
8 Songkh		79	1479	012345679	01235679	235679	37			
9 Cocos		124	01234578	1345678	128	78				

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	8	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	8	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	8	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	8	9	9	9	9	9	9	9	9	9



Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 6  
 Sunspot Number = 150.00  
 Required SNR (dB-Hz) for comm = 60.0

Time-of-day (UT) = 2  
 For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad					2	2	234	134	14	14
1 Darwin					4	24	2345	0235	03	07
2 ASprin					03	0134	0134	14	5	5
3 Townsv					2	2	012	015	145	4
4 Derby					1	12	012	029	0359	0359
5 Jayapu						6	16	13	234	246
6 Guam						5	5			5
7 Manila						8	8		4	1
8 Songkh						7	7	9	9	9
9 Cocos						8	8	48	48	48

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	3	4	4	4	4	4	4	4	4	4
1 Darwin	4	6	6	6	6	6	6	6	6	6
2 ASprin	4	5	5	5	5	5	5	5	5	5
3 Townsv	3	5	5	5	5	5	5	5	5	5
4 Derby	4	6	6	6	6	6	6	6	6	6
5 Jayapu	3	5	5	5	5	5	5	5	5	5
6 Guam	1	1	1	1	1	1	1	1	1	1
7 Manila	1	2	3	3	3	3	3	3	3	3
8 Songkh	1	2	2	2	2	2	2	2	2	2
9 Cocos	2	2	2	2	2	2	2	2	2	2

Time-of-day (UT) = 6  
 For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			2	23	23	23	134	134	14	145
1 Darwin				24	2345	2345	0235	035	06	0
2 ASprin			03	013	0134	0134	145	5	5	5
3 Townsv			2	02	012	0125	0145	01456	456	46
4 Derby				1	12	12	0235	035	035	0359
5 Jayapu				6	136	136	12346	123467	2346	024
6 Guam				5	5	5	35	357	35	3
7 Manila								56		
8 Songkh										
9 Cocos										4

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	3	5	5	5	5	5	5	5	5	5
1 Darwin	4	6	6	6	6	6	6	6	6	6
2 ASprin	4	5	5	5	5	5	5	5	5	5
3 Townsv	5	6	6	6	6	6	6	6	6	6
4 Derby	4	6	6	6	6	6	6	6	6	6
5 Jayapu	6	7	7	7	7	7	7	7	7	7
6 Guam	3	3	3	3	3	3	3	3	3	3
7 Manila	2	2	2	2	2	2	2	2	2	2
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	1	1	1	1	1	1	1	1	1	1

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	2	23	1234	1234	134	14	14	5	5	
1 Darwin	4	24	2345	02345	023456	0234567	035679	5679	67	679
2 ASprin	03	0134	0134	01345	1345	1456	56	56	567	
3 Townsv	2	2	0125	01245	012456	1456	1456	456	56	6
4 Derby	1	12	123	01235	012359	0123569	035679	35679	5679	579
5 Jayapu		1	13	12346	12346	12346	123479	0123479	02349	4
6 Guam			5	135	12345	12345	123457	12347	123	13
7 Manila				14	1456	1234568	1234568	124568	1249	149
8 Songkh						7	79	79	9	9

9 Cocos 4 14 124 1245 1458 4578 14578

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	4	5	5	5	5	5	5	5	5	5
1 Darwin	7	8	8	8	8	8	8	8	8	8
2 ASprin	5	7	7	7	7	7	7	7	7	7
3 Townsv	6	6	6	6	6	6	6	6	6	6
4 Derby	7	8	8	8	8	8	8	8	8	8
5 Jayapu	7	8	8	8	8	8	8	8	8	8
6 Guam	6	6	6	6	6	6	6	6	6	6
7 Manila	7	8	8	8	8	8	8	8	8	8
8 Songkh	2	2	2	2	2	2	2	2	2	2
9 Cocos	5	6	6	6	6	6	6	6	6	6

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	23	234	1234	14						
1 Darwin	4	234	2345	023459	35679	567	5679	679	67	67
2 ASprin		0134	0134	145	56	56	6	6		
3 Townsv		2	01245	145	1456	567	567	7	6	6
4 Derby	1	12	1239	012359	35679	5679	567	567	7	7
5 Jayapu		13	1234	12346	01234679	01234679	134679	47		
6 Guam			135	12345	123457	123457	123457	124	13	13
7 Manila			14	123456	12345689	12345689	12345689	1234569	14	14
8 Songkh				9	79	79	479	9	9	9
9 Cocos			14	14	1458	458	158	18	8	8

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	4	4	4	4	4	4	4	4	4	4
1 Darwin	6	8	8	8	8	8	8	8	8	8
2 ASprin	4	6	6	6	6	6	6	6	6	6



For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad		2	23	1234	134	134	13			5
1 Darwin		24	2345	0235	02357	03567	0367	6	6	6
2 ASprin		03	0134	0134	135	35	5	5	5	
3 Townsv			02	01245	01245	01245	0145	56	5	
4 Derby		12	12	023	035	0357	35			
5 Jayapu			1	1346	12346	12346	23467	2367	23	0
6 Guam				5	5	157	157	135	1	1
7 Manila				8	1568	1456	156	5		
8 Songkh					79					
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	4	5	5	5	5	5	5	5	5	5
1 Darwin	5	7	7	7	7	7	7	7	7	7
2 ASprin	4	5	5	5	5	5	5	5	5	5
3 Townsv	5	6	6	6	6	6	6	6	6	6
4 Derby	4	6	6	6	6	6	6	6	6	6
5 Jayapu	5	6	7	7	7	7	7	7	7	7
6 Guam	3	4	4	4	4	4	4	4	4	4
7 Manila	4	5	5	5	5	5	5	5	5	5
8 Songkh	2	2	2	2	2	2	2	2	2	2
9 Cocos	0	0	0	0	0	0	0	0	0	0

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 6  
 Sunspot Number = 150.00  
 Required SNR (dB-Hz) for comm = 80.0

Time-of-day (UT) = 2

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 6

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manilla										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manilla	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manilla										
8 Songkh										

Step 3 Results for: Month = June, Sunspot # = 150, Required SNR = 90 dB-Hz,

80JUN160.0UT

C-3d-2

# 9 Cocos

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0



3 Townsv	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 18

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 22

Step 3 Results for: Month = June, Sunspot # = 150, Required SNR = 30 dB-Hz,

80JUN150.OUT

C-3d-4

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 6  
 Sunspot Number = 50.00

TX LOCATION = -34.87, 138.50

RX LOCATION = -12.33, 130.83

2.0	25.4	20.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	61.	****	-17.	19.	34.	46.	44.	61.	62.	48.	29.	SNR	
6.0	25.4	21.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	64.	-53.	17.	39.	45.	52.	60.	63.	64.	48.	26.	SNR	
10.0	16.0	12.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	63.	43.	56.	60.	62.	62.	49.	31.	5.	-27.	-61.	SNR	
14.0	12.9	10.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	46.	56.	60.	62.	46.	22.	-13.	-53.	-90.	-90.	SNR	
18.0	14.4	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	62.	46.	56.	61.	62.	55.	45.	29.	8.	-18.	-45.	SNR	
22.0	17.5	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	64.	25.	46.	58.	61.	64.	52.	21.	-33.	-92.	****	SNR	

TX LOCATION = -34.87, 138.50

RX LOCATION = -23.67, 135.83

2.0	15.4	12.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	63.	-14.	38.	58.	63.	65.	47.	16.	-23.	-42.	-42.	SNR	
6.0	15.1	12.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	66.	24.	54.	65.	65.	67.	43.	4.	-37.	-36.	-35.	SNR	
10.0	9.3	7.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	66.	61.	65.	66.	48.	19.	-17.	-32.	-32.	-31.	-31.	SNR	
14.0	7.9	6.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	64.	60.	63.	56.	30.	-10.	-28.	-28.	-27.	-27.	-27.	SNR	
18.0	9.0	6.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	65.	59.	64.	67.	49.	21.	-13.	-30.	-30.	-29.	-29.	SNR	
22.0	10.8	9.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	66.	53.	64.	66.	52.	3.	-39.	-38.	-38.	-37.	-37.	SNR	

TX LOCATION = -34.87, 138.50

RX LOCATION = -19.33, 146.83

2.0	19.9	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	61.	-34.	23.	44.	52.	56.	63.	53.	33.	1.	-38.	SNR	
6.0	19.3	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	21.	51.	60.	61.	64.	66.	50.	21.	-21.	-65.	SNR	
10.0	11.9	9.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	64.	56.	61.	64.	58.	44.	16.	-20.	-57.	-66.	-65.	SNR	
14.0	10.3	8.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	64.	55.	60.	64.	51.	26.	-13.	-52.	-60.	-60.	-60.	SNR	
18.0	11.2	8.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	63.	54.	60.	64.	57.	40.	10.	-25.	-60.	-63.	-62.	SNR	
22.0	16.4	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	66.	41.	57.	62.	64.	66.	48.	9.	-44.	-78.	-78.	SNR	

TX LOCATION = -34.87, 138.50

RX LOCATION = -17.30, 123.63

2.0	24.3	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	62.	-97.	-5.	33.	43.	54.	60.	63.	62.	43.	20.	SNR	
6.0	24.4	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	64.	-55.	16.	38.	46.	51.	61.	64.	64.	43.	15.	SNR	
10.0	15.2	11.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

60.	62.	44.	56.	60.	62.	61.	45.	25.	-4.	-38.	-71.	SNR
14.0	12.0	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
56.	62.	48.	57.	61.	56.	40.	11.	-28.	-69.	-84.	-83.	SNR
18.0	14.0	10.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
61.	63.	48.	58.	62.	63.	54.	39.	15.	-16.	-49.	-81.	SNR
22.0	14.8	12.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
60.	63.	32.	50.	59.	63.	54.	19.	-44.	-96.	-96.	-95.	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = -2.47, 140.63												
2.0	29.0	23.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
53.	2.	****	-43.	6.	25.	33.	45.	31.	-1.	57.	46.	SNR
6.0	28.8	24.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
52.	-13.	-57.	12.	33.	41.	47.	51.	35.	-5.	60.	47.	SNR
10.0	19.0	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
54.	31.	37.	45.	50.	51.	29.	56.	46.	31.	9.	-19.	SNR
14.0	15.2	12.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
51.	25.	34.	45.	49.	28.	54.	39.	17.	-16.	-54.	-91.	SNR
18.0	15.0	11.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
55.	37.	34.	45.	50.	30.	52.	39.	17.	-15.	-51.	-87.	SNR
22.0	23.8	20.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
52.	-16.	5.	36.	46.	52.	55.	30.	-31.	51.	30.	-8.	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = 13.45, 144.75												
2.0	26.1	21.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
30.	43.	****	****	-42.	-5.	15.	31.	43.	45.	24.	-8.	SNR
6.0	25.9	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
41.	52.	****	-23.	14.	28.	41.	48.	51.	53.	26.	-13.	SNR
10.0	17.7	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
35.	49.	17.	37.	44.	48.	49.	34.	11.	-25.	-77.	****	SNR
14.0	13.9	11.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
34.	47.	20.	35.	44.	48.	27.	-8.	-65.	****	****	****	SNR
18.0	10.4	7.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
28.	36.	14.	33.	37.	18.	-17.	-76.	****	****	****	****	SNR
22.0	22.6	19.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
35.	54.	-47.	10.	35.	46.	51.	54.	54.	21.	-33.	****	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = 14.67, 121.05												
2.0	28.5	23.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
31.	46.	****	****	-30.	1.	18.	32.	44.	47.	45.	20.	SNR
6.0	28.8	24.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
33.	49.	****	-72.	-12.	11.	28.	39.	45.	49.	49.	23.	SNR
10.0	19.4	15.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
31.	46.	-1.	28.	39.	45.	46.	44.	23.	-2.	-39.	-89.	SNR
14.0	14.3	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
31.	44.	13.	32.	41.	45.	26.	-5.	-58.	****	****	****	SNR
18.0	13.5	9.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
31.	38.	-3.	27.	37.	39.	24.	-1.	-40.	-93.	****	****	SNR
22.0	16.1	14.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
32.	49.	-31.	16.	34.	46.	49.	7.	-67.	****	****	****	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = 17.22, 100.62												
2.0	30.4	24.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
31.	37.	****	****	-35.	-1.	20.	33.	38.	39.	-2.	35.	SNR
6.0	30.8	26.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ

29.	9.	****	****	-57.	-21.	4.	24.	33.	37.	-2.	39.	SNR
10.0	20.4	15.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
28.	35.	-40.	13.	29.	36.	37.	42.	25.	4.	-29.	-75.	SNR
14.0	14.8	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
29.	45.	11.	30.	37.	45.	28.	-1.	-53.	****	****	****	SNR
18.0	16.0	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
33.	39.	10.	29.	38.	39.	42.	19.	-15.	-66.	****	****	SNR
22.0	11.6	10.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
22.	38.	-28.	15.	34.	17.	-71.	****	****	****	****	****	SNR
TX LOCATION = -34.87, 138.50												
RX LOCATION = -12.20, 96.90												
2.0	24.3	19.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
44.	51.	****	-31.	13.	29.	41.	50.	52.	46.	9.	-39.	SNR
6.0	24.9	21.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
41.	49.	****	-37.	-10.	13.	29.	43.	48.	49.	15.	-33.	SNR
10.0	16.5	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
34.	49.	12.	39.	47.	49.	47.	25.	-3.	-48.	****	****	SNR
14.0	11.7	9.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
36.	50.	34.	47.	50.	33.	-4.	-70.	****	****	****	****	SNR
18.0	12.5	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
44.	53.	32.	47.	53.	48.	18.	-21.	-77.	****	****	****	SNR
22.0	9.7	6.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
39.	41.	20.	40.	42.	14.	-35.	****	****	****	****	****	SNR
TX LOCATION = -12.33, 130.83												
RX LOCATION = -34.87, 138.50												
2.0	25.4	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
57.	59.	****	-17.	19.	34.	44.	44.	60.	60.	49.	35.	SNR
6.0	25.4	19.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
60.	61.	-53.	16.	38.	44.	51.	60.	62.	62.	51.	40.	SNR
10.0	16.0	12.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
55.	61.	40.	53.	58.	61.	61.	49.	36.	15.	-11.	-41.	SNR
14.0	12.9	10.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
55.	61.	44.	55.	59.	61.	48.	31.	5.	-27.	-59.	-90.	SNR
18.0	14.4	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
56.	61.	45.	55.	60.	62.	55.	45.	29.	8.	-18.	-45.	SNR
22.0	17.5	15.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
61.	64.	26.	47.	58.	61.	64.	53.	31.	-6.	-53.	-99.	SNR
TX LOCATION = -12.33, 130.83												
RX LOCATION = -23.67, 135.83												
2.0	18.0	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
67.	63.	-33.	29.	48.	59.	64.	67.	51.	30.	2.	-28.	SNR
6.0	18.2	14.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
69.	65.	1.	44.	60.	59.	66.	69.	56.	42.	22.	-2.	SNR
10.0	12.4	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	68.	59.	64.	67.	68.	56.	40.	17.	-9.	-34.	-40.	SNR
14.0	9.3	7.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
66.	64.	58.	63.	65.	52.	30.	0.	-30.	-35.	-35.	-35.	SNR
18.0	9.4	6.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
67.	64.	58.	63.	66.	55.	37.	10.	-18.	-36.	-36.	-35.	SNR
22.0	12.4	10.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	67.	48.	62.	65.	68.	45.	6.	-38.	-45.	-45.	-44.	SNR
TX LOCATION = -12.33, 130.83												
RX LOCATION = -19.33, 146.83												
2.0	21.6	16.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ

64.	61.	-53.	13.	39.	50.	56.	62.	64.	51.	34.	9.	SNR	
6.0	22.0	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	1.	42.	54.	61.	62.	66.	68.	56.	44.	27.	SNR	
10.0	15.2	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	67.	56.	58.	64.	67.	67.	53.	39.	18.	-7.	-33.	SNR	
14.0	11.6	9.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	65.	51.	60.	65.	59.	46.	25.	-3.	-34.	-62.	-61.	SNR	
18.0	10.7	7.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	62.	52.	60.	64.	56.	41.	17.	-12.	-43.	-63.	-62.	SNR	
22.0	17.7	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	66.	37.	56.	61.	63.	66.	58.	41.	11.	-28.	-66.	SNR	
TX LOCATION = -12.33, 130.83													
RX LOCATION = -17.30, 123.63													
2.0	15.1	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	66.	-15.	39.	59.	64.	69.	48.	15.	-22.	-22.	-21.	SNR	
6.0	15.5	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	66.	0.	45.	60.	65.	68.	51.	19.	-18.	-17.	-17.	SNR	
10.0	11.2	8.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	70.	62.	67.	70.	63.	42.	7.	-16.	-15.	-15.	-14.	SNR	
14.0	7.6	5.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	66.	63.	66.	58.	32.	-4.	-12.	-11.	-11.	-11.	-10.	SNR	
18.0	7.2	5.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	66.	63.	67.	60.	42.	14.	-12.	-12.	-11.	-11.	-10.	SNR	
22.0	8.4	7.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	66.	57.	64.	60.	22.	-18.	-17.	-16.	-15.	-15.	-15.	SNR	
TX LOCATION = -12.33, 130.83													
RX LOCATION = -2.47, 140.63													
2.0	20.2	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	63.	-64.	11.	43.	55.	60.	65.	58.	40.	9.	-27.	SNR	
6.0	20.4	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	66.	-12.	39.	55.	59.	61.	66.	61.	43.	22.	-3.	SNR	
10.0	17.5	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	66.	53.	60.	64.	64.	67.	61.	48.	24.	-6.	-37.	SNR	
14.0	11.9	8.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	61.	48.	59.	61.	59.	48.	25.	-7.	-39.	-44.	-43.	SNR	
18.0	8.3	5.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	59.	53.	59.	58.	49.	33.	1.	-43.	-42.	-42.	-42.	SNR	
22.0	14.7	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	66.	38.	59.	63.	65.	60.	41.	3.	-39.	-54.	-53.	SNR	
TX LOCATION = -12.33, 130.83													
RX LOCATION = 13.45, 144.75													
2.0	27.7	23.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	58.	****	-79.	8.	33.	41.	52.	54.	58.	59.	43.	SNR	
6.0	26.7	21.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	59.	****	-10.	28.	43.	47.	53.	58.	60.	54.	47.	SNR	
10.0	27.5	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	62.	27.	40.	50.	56.	59.	61.	62.	62.	60.	48.	SNR	
14.0	20.4	14.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	59.	21.	42.	51.	57.	60.	60.	53.	42.	26.	3.	SNR	
18.0	13.9	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	51.	29.	44.	51.	54.	48.	37.	19.	-7.	-36.	-67.	SNR	
22.0	23.1	20.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	62.	-16.	33.	48.	57.	61.	61.	63.	50.	32.	4.	SNR	
TX LOCATION = -12.33, 130.83													

RX LOCATION = 14.67, 121.05

2.0	28.4	24.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	59.	****	-59.	15.	37.	44.	53.	55.	59.	61.	47.	SNR	
6.0	26.8	23.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	58.	****	-40.	21.	39.	44.	49.	54.	59.	53.	39.	SNR	
10.0	28.6	22.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	61.	14.	37.	47.	53.	56.	59.	60.	62.	62.	52.	SNR	
14.0	21.3	15.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	58.	19.	38.	49.	55.	57.	60.	58.	43.	21.	-10.	SNR	
18.0	15.5	11.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	52.	19.	38.	48.	53.	55.	46.	33.	14.	-10.	-37.	SNR	
22.0	17.4	15.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	59.	-1.	35.	48.	54.	59.	48.	23.	-20.	-73.	****	SNR	

TX LOCATION = -12.33, 130.83

RX LOCATION = 17.22, 100.62

2.0	22.4	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	36.	****	-44.	-3.	16.	35.	36.	44.	20.	-39.	51.	SNR	
6.0	27.8	23.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	19.	****	-77.	-23.	6.	25.	35.	26.	15.	51.	43.	SNR	
10.0	23.5	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	49.	-24.	22.	31.	39.	44.	48.	51.	37.	25.	44.	SNR	
14.0	18.7	13.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	50.	12.	31.	43.	48.	51.	48.	26.	-1.	-41.	-91.	SNR	
18.0	13.3	9.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	44.	13.	33.	43.	46.	29.	4.	-34.	-83.	****	****	SNR	
22.0	11.3	9.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
31.	42.	-9.	25.	39.	22.	-1.	-40.	****	****	****	****	SNR	

TX LOCATION = -12.33, 130.83

RX LOCATION = -12.20, 96.90

2.0	34.0	29.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	-9.	****	-17.	21.	38.	47.	54.	55.	57.	25.	-10.	SNR	
6.0	35.5	30.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	-33.	****	-49.	6.	26.	38.	47.	51.	55.	26.	-16.	SNR	
10.0	26.9	21.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	31.	19.	40.	51.	54.	54.	56.	33.	-1.	53.	41.	SNR	
14.0	16.3	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	50.	40.	53.	54.	41.	56.	46.	27.	-2.	-38.	-76.	SNR	
18.0	13.6	9.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	51.	43.	53.	53.	57.	48.	34.	14.	-14.	-45.	-77.	SNR	
22.0	11.6	8.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	45.	30.	43.	35.	48.	34.	10.	-24.	-62.	****	****	SNR	

TX LOCATION = -23.67, 135.83

RX LOCATION = -34.87, 138.50

2.0	15.4	12.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	63.	-14.	38.	58.	62.	65.	47.	16.	-23.	-42.	-42.	SNR	
6.0	15.1	12.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	65.	24.	54.	64.	64.	66.	42.	4.	-37.	-36.	-35.	SNR	
10.0	9.3	7.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	65.	60.	64.	64.	47.	18.	-17.	-32.	-32.	-31.	-31.	SNR	
14.0	7.9	6.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	63.	58.	62.	55.	29.	-10.	-28.	-28.	-27.	-27.	-27.	SNR	
18.0	9.0	6.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	64.	58.	63.	66.	49.	21.	-13.	-30.	-30.	-29.	-29.	SNR	
22.0	10.8	9.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

67.	66.	53.	64.	66.	52.	3.	-39.	-38.	-38.	-37.	-37.	SNR
TX LOCATION = -23.67, 135.83												
RX LOCATION = -12.33, 130.83												
2.0	18.0	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
67.	63.	-33.	29.	48.	59.	63.	67.	51.	30.	2.	-28.	SNR
6.0	18.2	14.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	64.	1.	44.	60.	59.	65.	68.	56.	42.	22.	-2.	SNR
10.0	12.4	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	68.	59.	64.	67.	68.	56.	40.	17.	-9.	-34.	-40.	SNR
14.0	9.3	7.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
66.	64.	58.	63.	65.	52.	30.	0.	-30.	-35.	-35.	-35.	SNR
18.0	9.4	6.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
67.	64.	58.	64.	66.	55.	37.	10.	-18.	-36.	-36.	-35.	SNR
22.0	12.4	10.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	66.	47.	61.	64.	68.	45.	6.	-38.	-45.	-45.	-44.	SNR
TX LOCATION = -23.67, 135.83												
RX LOCATION = -19.33, 116.83												
2.0	15.5	12.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
66.	64.	-30.	32.	51.	63.	66.	53.	32.	1.	-30.	-37.	SNR
6.0	15.3	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
69.	67.	24.	55.	66.	67.	69.	57.	40.	15.	-12.	-33.	SNR
10.0	10.0	7.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
68.	68.	59.	66.	68.	57.	39.	11.	-18.	-31.	-31.	-30.	SNR
14.0	8.3	6.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
65.	65.	60.	64.	60.	45.	18.	-14.	-27.	-27.	-27.	-26.	SNR
18.0	8.6	5.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
62.	64.	60.	64.	62.	50.	27.	-1.	-29.	-28.	-28.	-28.	SNR
22.0	13.3	11.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
69.	68.	47.	63.	65.	68.	55.	27.	-13.	-40.	-39.	-39.	SNR
TX LOCATION = -23.67, 135.83												
RX LOCATION = -17.30, 123.63												
2.0	18.8	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
66.	63.	-26.	31.	49.	59.	63.	66.	54.	36.	9.	-22.	SNR
6.0	18.9	14.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
67.	63.	-5.	42.	55.	59.	63.	67.	57.	45.	26.	3.	SNR
10.0	12.5	9.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
67.	66.	58.	63.	66.	67.	55.	39.	16.	-10.	-36.	-46.	SNR
14.0	9.4	7.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
64.	64.	58.	62.	64.	51.	29.	-2.	-33.	-40.	-40.	-39.	SNR
18.0	10.2	6.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
62.	64.	58.	63.	66.	58.	43.	20.	-7.	-33.	-41.	-40.	SNR
22.0	11.3	9.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
67.	65.	48.	60.	64.	57.	28.	-21.	-49.	-48.	-48.	-48.	SNR
TX LOCATION = -23.67, 135.83												
RX LOCATION = -2.47, 140.63												
2.0	25.7	22.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
62.	61.	****	-32.	14.	37.	44.	48.	60.	63.	50.	31.	SNR
6.0	26.2	22.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
64.	64.	-60.	15.	37.	45.	52.	58.	63.	65.	54.	35.	SNR
10.0	19.1	15.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
61.	62.	39.	49.	56.	59.	62.	63.	49.	28.	-4.	-42.	SNR
14.0	13.9	9.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ
54.	57.	38.	51.	56.	59.	51.	35.	6.	-30.	-67.	-85.	SNR
18.0	11.6	8.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0 FREQ



	55.	56.	40.	52.	57.	54.	43.	22.	-6.	-37.	-69.	-86.	SNR
22.0	20.7	18.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	65.	11.	42.	54.	60.	63.	65.	56.	39.	9.	-30.	SNR
TX LOCATION = -23.67, 135.83													
RX LOCATION = 13.45, 144.75													
2.0	24.1	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	50.	46.	****	-79.	-20.	14.	32.	42.	47.	50.	10.	40.	SNR
6.0	24.3	21.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	55.	54.	****	-9.	24.	37.	45.	51.	54.	56.	15.	-38.	SNR
10.0	21.2	16.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	51.	56.	26.	35.	46.	52.	55.	57.	52.	22.	44.	-71.	SNR
14.0	14.8	10.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	47.	49.	19.	38.	46.	50.	39.	15.	-28.	-87.	****	****	SNR
18.0	9.4	6.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	33.	41.	28.	41.	41.	15.	-30.	-97.	****	****	****	****	SNR
22.0	19.9	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	54.	56.	-47.	24.	39.	50.	54.	56.	32.	-7.	-71.	****	SNR
TX LOCATION = -23.67, 135.83													
RX LOCATION = 14.67, 121.05													
2.0	26.9	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	46.	45.	****	-62.	-13.	13.	29.	41.	46.	49.	46.	18.	SNR
6.0	27.2	20.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	49.	46.	****	-37.	-2.	19.	33.	41.	46.	50.	50.	28.	SNR
10.0	23.6	18.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	49.	53.	2.	26.	41.	47.	51.	53.	54.	39.	28.	11.	SNR
14.0	15.4	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	42.	48.	13.	35.	44.	48.	46.	24.	-2.	-40.	-87.	****	SNR
18.0	11.0	7.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	32.	37.	17.	34.	39.	27.	1.	-46.	****	****	****	****	SNR
22.0	14.6	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	36.	49.	-29.	22.	40.	47.	33.	-20.	****	****	****	****	SNR
TX LOCATION = -23.67, 135.83													
RX LOCATION = 17.22, 100.62													
2.0	31.8	23.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	33.	48.	****	-99.	-22.	7.	21.	34.	45.	48.	49.	45.	SNR
6.0	24.5	21.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	44.	41.	****	****	-39.	5.	21.	34.	40.	45.	10.	37.	SNR
10.0	25.9	20.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	36.	51.	-23.	10.	32.	41.	47.	50.	51.	49.	32.	18.	SNR
14.0	16.1	12.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	33.	48.	8.	35.	43.	47.	45.	23.	-2.	-39.	-88.	****	SNR
18.0	12.7	8.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	32.	40.	14.	34.	41.	39.	18.	-15.	-66.	****	****	****	SNR
22.0	12.0	10.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	27.	41.	-15.	17.	36.	26.	-44.	****	****	****	****	****	SNR
TX LOCATION = -23.67, 135.83													
RX LOCATION = -12.20, 96.90													
2.0	25.3	19.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	46.	51.	****	-17.	14.	36.	45.	50.	52.	51.	28.	0.	SNR
6.0	25.6	19.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	47.	47.	****	-42.	-3.	23.	33.	44.	49.	50.	32.	13.	SNR
10.0	18.0	14.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	46.	52.	14.	39.	49.	52.	52.	46.	24.	0.	-35.	-79.	SNR
14.0	11.9	9.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

47.	53.	40.	51.	53.	39.	15.	-28.	-87.	****	****	****	SNR	
18.0	11.6	9.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	54.	38.	51.	54.	39.	43.	-34.	-96.	****	****	****	SNR	
22.0	9.5	6.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	44.	25.	43.	45.	17.	-32.	****	****	****	****	****	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -34.87, 138.50													
2.0	19.9	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	60.	-34.	23.	44.	52.	55.	62.	53.	33.	1.	-38.	SNR	
6.0	19.3	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	21.	51.	59.	60.	62.	65.	50.	21.	-21.	-65.	SNR	
10.0	11.9	9.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	62.	55.	60.	62.	56.	42.	15.	-21.	-57.	-66.	-65.	SNR	
14.0	10.3	8.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	62.	53.	58.	62.	51.	26.	-13.	-52.	-60.	-60.	-60.	SNR	
18.0	11.2	8.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	63.	52.	59.	64.	56.	40.	10.	-25.	-60.	-63.	-62.	SNR	
22.0	16.4	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	66.	40.	56.	61.	64.	66.	48.	9.	-44.	-78.	-78.	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -12.33, 130.83													
2.0	21.6	16.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	61.	-53.	13.	39.	50.	56.	62.	64.	51.	34.	9.	SNR	
6.0	22.0	16.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	64.	1.	42.	54.	60.	61.	65.	67.	56.	44.	27.	SNR	
10.0	15.2	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	66.	56.	58.	64.	66.	66.	53.	39.	18.	-7.	-33.	SNR	
14.0	11.6	9.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	64.	51.	60.	64.	58.	46.	25.	-3.	-34.	-62.	-61.	SNR	
18.0	10.7	7.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	62.	51.	60.	64.	56.	41.	17.	-12.	-43.	-63.	-62.	SNR	
22.0	17.7	15.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	67.	35.	53.	60.	63.	66.	58.	41.	11.	-28.	-66.	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -23.67, 135.83													
2.0	15.5	12.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	64.	-30.	32.	51.	63.	66.	53.	32.	1.	-30.	-37.	SNR	
6.0	15.3	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	67.	24.	55.	66.	67.	68.	56.	39.	15.	-12.	-33.	SNR	
10.0	10.0	7.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	67.	59.	66.	68.	56.	38.	11.	-18.	-31.	-31.	-30.	SNR	
14.0	8.3	6.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	60.	63.	59.	45.	18.	-14.	-27.	-27.	-27.	-26.	SNR	
18.0	8.6	5.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	64.	59.	64.	62.	50.	27.	-1.	-29.	-28.	-28.	-28.	SNR	
22.0	13.3	11.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	68.	46.	62.	65.	68.	55.	27.	-13.	-40.	-39.	-39.	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -17.30, 123.63													
2.0	25.5	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	59.	****	-24.	15.	32.	44.	46.	60.	61.	50.	37.	SNR	
6.0	25.7	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	62.	-61.	13.	37.	44.	52.	59.	63.	63.	53.	43.	SNR	
10.0	17.1	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	56.	63.	41.	52.	60.	62.	64.	54.	44.	28.	6.	-19.	SNR
14.0	13.1	10.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	62.	46.	56.	61.	62.	50.	35.	11.	-19.	-51.	-80.	SNR
18.0	13.4	9.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	61.	61.	45.	57.	61.	62.	52.	39.	20.	-5.	-34.	-62.	SNR
22.0	18.5	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	65.	19.	42.	56.	61.	64.	64.	43.	14.	-26.	-70.	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = -2.47, 140.63													
2.0	22.5	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	62.	****	4.	35.	48.	53.	60.	64.	51.	30.	-4.	SNR
6.0	22.8	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	65.	-31.	43.	55.	59.	58.	63.	67.	55.	33.	-1.	SNR
10.0	17.5	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	64.	63.	52.	58.	61.	61.	64.	58.	42.	14.	-23.	-59.	SNR
14.0	12.8	9.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	61.	59.	45.	56.	58.	61.	50.	28.	-4.	-40.	-67.	-66.	SNR
18.0	9.1	6.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	59.	55.	47.	54.	59.	46.	24.	-14.	-50.	-68.	-67.	-67.	SNR
22.0	20.9	18.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	67.	25.	51.	60.	62.	64.	67.	67.	44.	18.	-16.	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = 13.45, 144.75													
2.0	30.4	26.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	51.	58.	****	-84.	-8.	24.	40.	45.	55.	6.	59.	56.	SNR
6.0	30.1	26.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	62.	-67.	8.	34.	45.	51.	53.	57.	10.	62.	57.	SNR
10.0	27.2	21.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	32.	29.	41.	51.	54.	56.	57.	36.	62.	58.	44.	SNR
14.0	19.6	13.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	49.	20.	41.	48.	51.	37.	57.	49.	35.	15.	-11.	SNR
18.0	11.2	7.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	48.	40.	28.	40.	28.	44.	31.	6.	-29.	-68.	****	****	SNR
22.0	27.5	24.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	53.	-10.	-35.	21.	42.	52.	56.	57.	32.	-6.	58.	43.	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = 14.67, 121.05													
2.0	26.1	22.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	49.	47.	****	****	-23.	11.	29.	40.	44.	49.	31.	-2.	SNR
6.0	23.0	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	50.	47.	****	-73.	9.	32.	40.	45.	49.	32.	-6.	54.	SNR
10.0	23.8	18.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	49.	52.	2.	27.	41.	48.	51.	52.	54.	40.	19.	-17.	SNR
14.0	16.4	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	38.	48.	9.	35.	45.	48.	48.	28.	-1.	-48.	****	****	SNR
18.0	10.8	7.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	31.	38.	14.	34.	39.	26.	-1.	-50.	****	****	****	****	SNR
22.0	17.4	15.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	50.	52.	-49.	15.	36.	47.	51.	33.	-10.	-86.	****	****	SNR
TX LOCATION = -19.33, 146.83													
RX LOCATION = 17.22, 100.62													
2.0	25.3	21.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	41.	39.	****	****	-43.	-3.	20.	32.	38.	43.	18.	-21.	SNR
6.0	23.0	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

40.	37.	****	****	-37.	1.	22.	33.	39.	22.	-19.	-88.	SNR	
10.0	26.3	20.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
35.	50.	-41.	5.	28.	37.	42.	49.	51.	49.	31.	7.	SNR	
14.0	17.5	12.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
33.	46.	5.	30.	42.	46.	45.	31.	5.	-37.	-95.	****	SNR	
18.0	12.8	9.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
31.	40.	6.	33.	40.	38.	17.	-15.	-65.	****	****	****	SNR	
22.0	14.7	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
29.	44.	-53.	8.	30.	42.	25.	-35.	****	****	****	****	SNR	
TX LOCATION = -19.33, 146.83													
RX LOCATION = -12.20, 96.90													
2.0	28.1	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
33.	48.	****	-74.	-7.	17.	27.	38.	48.	49.	45.	21.	SNR	
6.0	28.4	21.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	47.	****	-87.	-16.	9.	25.	39.	46.	48.	46.	26.	SNR	
10.0	19.3	15.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
35.	50.	5.	30.	44.	48.	50.	48.	27.	6.	-24.	-64.	SNR	
14.0	13.9	10.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
36.	51.	19.	44.	50.	51.	29.	2.	-41.	-98.	****	****	SNR	
18.0	12.8	8.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	50.	28.	45.	50.	46.	23.	-10.	-57.	****	****	****	SNR	
22.0	10.9	9.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
31.	45.	-1.	31.	44.	13.	-90.	****	****	****	****	****	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -34.87, 138.50													
2.0	24.3	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	62.	-97.	-5.	33.	42.	54.	60.	62.	62.	43.	20.	SNR	
6.0	24.4	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	63.	-55.	16.	38.	45.	51.	61.	64.	64.	43.	15.	SNR	
10.0	15.2	11.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	61.	42.	54.	59.	61.	61.	45.	25.	-4.	-38.	-71.	SNR	
14.0	12.0	9.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	60.	45.	56.	60.	56.	44.	23.	-7.	-40.	-73.	-83.	SNR	
18.0	14.0	9.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	61.	46.	56.	61.	62.	55.	44.	27.	5.	-22.	-49.	SNR	
22.0	14.8	12.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	63.	34.	53.	60.	62.	54.	30.	-15.	-67.	-96.	-95.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -12.33, 130.83													
2.0	15.1	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	66.	-15.	39.	59.	64.	69.	48.	15.	-22.	-22.	-21.	SNR	
6.0	15.5	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	67.	0.	45.	60.	65.	69.	51.	19.	-18.	-17.	-17.	SNR	
10.0	11.2	8.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
70.	70.	63.	67.	70.	64.	42.	7.	-16.	-15.	-15.	-14.	SNR	
14.0	7.6	5.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	66.	63.	66.	58.	32.	-4.	-12.	-11.	-11.	-11.	-10.	SNR	
18.0	7.2	5.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	65.	63.	66.	60.	42.	14.	-12.	-12.	-11.	-11.	-10.	SNR	
22.0	8.4	7.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	67.	58.	65.	60.	22.	-18.	-17.	-16.	-15.	-15.	-15.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -23.67, 135.83													
2.0	18.8	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

66.	63.	-26.	31.	49.	59.	63.	66.	54.	36.	9.	-22.	SNR	
6.0	18.9	14.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	64.	-5.	42.	55.	60.	65.	68.	57.	45.	26.	3.	SNR	
10.0	12.5	9.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	67.	58.	63.	66.	67.	55.	40.	16.	-10.	-36.	-46.	SNR	
14.0	9.4	7.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	57.	62.	65.	51.	29.	-2.	-33.	-40.	-40.	-39.	SNR	
18.0	10.2	6.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	64.	58.	63.	66.	58.	43.	20.	-7.	-33.	-41.	-40.	SNR	
22.0	11.3	9.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	66.	50.	63.	65.	57.	28.	-21.	-49.	-48.	-48.	-48.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -19.33, 146.83													
2.0	25.5	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	59.	****	-24.	15.	32.	44.	46.	60.	61.	50.	37.	SNR	
6.0	25.7	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	62.	-61.	13.	37.	45.	54.	60.	63.	64.	53.	43.	SNR	
10.0	17.1	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	64.	41.	53.	60.	63.	64.	55.	44.	28.	6.	-19.	SNR	
14.0	13.1	10.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	63.	46.	57.	62.	63.	50.	35.	11.	-19.	-51.	-80.	SNR	
18.0	13.4	9.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	61.	46.	57.	61.	62.	52.	39.	20.	-5.	-34.	-62.	SNR	
22.0	18.5	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	65.	22.	46.	58.	61.	64.	64.	43.	14.	-26.	-70.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = -2.47, 140.63													
2.0	27.7	23.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	62.	****	-27.	13.	33.	45.	52.	60.	63.	63.	46.	SNR	
6.0	28.3	24.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
65.	64.	-97.	5.	34.	44.	51.	58.	61.	64.	65.	50.	SNR	
10.0	22.4	17.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	64.	36.	48.	56.	59.	61.	64.	64.	52.	36.	11.	SNR	
14.0	15.0	10.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	57.	37.	51.	56.	59.	59.	43.	21.	-10.	-45.	-79.	SNR	
18.0	11.6	8.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	56.	42.	52.	57.	54.	43.	23.	-5.	-37.	-69.	-88.	SNR	
22.0	18.0	15.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	64.	17.	46.	56.	59.	63.	64.	37.	1.	-45.	-91.	SNR	
TX LOCATION = -17.30, 123.63													
RX LOCATION = 13.45, 144.75													
2.0	32.5	28.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	-14.	****	-78.	-9.	21.	37.	45.	49.	34.	1.	42.	SNR	
6.0	31.0	26.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	-23.	****	-23.	16.	34.	44.	51.	53.	25.	-24.	57.	SNR	
10.0	22.7	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	57.	23.	35.	46.	53.	56.	57.	58.	38.	12.	55.	SNR	
14.0	16.0	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	52.	16.	40.	48.	52.	53.	32.	54.	-46.	****	****	SNR	
18.0	10.8	7.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	45.	28.	43.	46.	32.	6.	-40.	****	****	****	****	SNR	
22.0	16.8	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	54.	-27.	29.	44.	52.	55.	29.	-21.	****	****	****	SNR	
TX LOCATION = -17.30, 123.63													

RX LOCATION = 14.67, 121.05

2.0	32.1	27.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	61.	****	-51.	9.	32.	44.	48.	57.	26.	60.	61.	61.	SNR
6.0	31.3	27.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	60.	****	-49.	12.	33.	42.	49.	55.	57.	60.	60.	60.	SNR
10.0	31.0	24.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	29.	10.	33.	45.	51.	53.	55.	55.	32.	62.	60.	60.	SNR
14.0	21.6	15.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	48.	12.	37.	46.	49.	49.	58.	56.	46.	33.	14.	14.	SNR
18.0	15.0	10.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	42.	20.	38.	42.	31.	53.	43.	29.	8.	-18.	-47.	-47.	SNR
22.0	15.2	13.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	56.	4.	36.	44.	18.	53.	25.	-25.	-86.	****	****	****	SNR

TX LOCATION = -17.30, 123.63

RX LOCATION = 17.22, 100.62

2.0	24.5	21.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	48.	****	-34.	1.	18.	36.	42.	47.	51.	20.	-12.	-12.	SNR
6.0	30.6	26.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	-13.	****	-81.	-26.	5.	25.	35.	41.	17.	-24.	52.	52.	SNR
10.0	26.2	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	52.	-29.	15.	31.	40.	46.	50.	53.	54.	36.	16.	16.	SNR
14.0	17.6	12.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	49.	13.	33.	43.	49.	50.	36.	15.	-20.	-68.	****	****	SNR
18.0	12.0	8.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
35.	42.	16.	35.	43.	40.	44.	-17.	-67.	****	****	****	****	SNR
22.0	9.1	8.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
33.	38.	7.	35.	39.	10.	-10.	-64.	****	****	****	****	****	SNR

TX LOCATION = -17.30, 123.63

RX LOCATION = -12.20, 96.90

2.0	30.9	26.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	64.	-83.	6.	34.	48.	58.	58.	63.	63.	64.	63.	63.	SNR
6.0	31.6	23.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	60.	****	-43.	12.	33.	43.	50.	58.	60.	61.	60.	60.	SNR
10.0	23.9	18.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	61.	24.	47.	55.	58.	59.	60.	62.	55.	45.	30.	30.	SNR
14.0	14.7	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	60.	45.	57.	59.	60.	53.	41.	21.	-7.	-40.	-73.	-73.	SNR
18.0	12.7	9.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	61.	47.	57.	59.	60.	46.	26.	-2.	-36.	-71.	****	****	SNR
22.0	10.0	6.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	53.	41.	52.	55.	44.	21.	-16.	-57.	-98.	****	****	****	SNR

TX LOCATION = -2.47, 140.63

RX LOCATION = -34.87, 138.50

2.0	29.0	21.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	28.	****	-43.	7.	25.	33.	45.	32.	7.	56.	47.	47.	SNR
6.0	28.8	22.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	31.	-57.	12.	33.	41.	47.	51.	37.	17.	58.	49.	49.	SNR
10.0	19.0	15.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	33.	38.	44.	51.	53.	33.	57.	47.	35.	17.	-6.	-6.	SNR
14.0	15.2	11.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	35.	35.	48.	52.	34.	56.	43.	26.	2.	-27.	-58.	-58.	SNR
18.0	15.0	10.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	50.	37.	47.	51.	34.	52.	42.	26.	4.	-23.	-52.	-52.	SNR
22.0	23.8	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	52.	-3.	6.	36.	46.	53.	56.	33.	-9.	51.	36.	11.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = -12.33, 130.83													
2.0	20.2	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	64.	-64.	11.	43.	56.	61.	65.	58.	40.	9.	-27.	SNR
6.0	20.4	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	70.	67.	-12.	39.	56.	61.	63.	67.	61.	43.	22.	-3.	SNR
10.0	17.5	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	69.	69.	56.	63.	68.	68.	70.	63.	49.	25.	-6.	-37.	SNR
14.0	11.9	8.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	66.	56.	65.	67.	63.	50.	25.	-7.	-39.	-44.	-43.	SNR
18.0	8.3	5.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	64.	59.	64.	62.	51.	34.	1.	-43.	-42.	-42.	-42.	SNR
22.0	14.7	13.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	69.	67.	37.	59.	64.	66.	61.	41.	3.	-39.	-54.	-53.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = -23.67, 135.83													
2.0	25.7	22.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	62.	62.	****	-32.	15.	37.	46.	49.	60.	63.	50.	31.	SNR
6.0	26.2	22.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	64.	65.	-60.	15.	38.	46.	54.	60.	63.	65.	54.	35.	SNR
10.0	19.1	15.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	62.	65.	42.	52.	59.	63.	65.	65.	50.	28.	-4.	-42.	SNR
14.0	13.9	9.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	61.	43.	55.	60.	62.	53.	35.	6.	-30.	-67.	-85.	SNR
18.0	11.6	8.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	60.	46.	57.	61.	55.	43.	23.	-6.	-37.	-69.	-86.	SNR
22.0	20.7	18.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	65.	12.	42.	55.	61.	63.	65.	56.	39.	9.	-30.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = -19.33, 146.83													
2.0	22.5	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	62.	****	4.	35.	49.	54.	60.	64.	51.	30.	-4.	SNR
6.0	22.8	19.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	67.	-31.	43.	56.	62.	61.	65.	68.	55.	33.	-1.	SNR
10.0	17.5	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	67.	55.	61.	65.	66.	68.	59.	43.	14.	-23.	-59.	SNR
14.0	12.8	9.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	64.	53.	62.	64.	66.	52.	29.	-4.	-40.	-67.	-66.	SNR
18.0	9.1	6.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	62.	60.	54.	59.	62.	48.	24.	-14.	-50.	-68.	-67.	-67.	SNR
22.0	20.9	18.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	68.	67.	27.	53.	61.	63.	64.	67.	67.	44.	18.	-16.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = -17.30, 123.63													
2.0	27.7	23.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	63.	62.	****	-27.	13.	34.	47.	53.	60.	63.	63.	46.	SNR
6.0	28.3	24.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	65.	64.	-97.	6.	35.	45.	52.	60.	62.	64.	65.	50.	SNR
10.0	22.4	17.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	58.	65.	40.	51.	59.	63.	63.	65.	65.	52.	36.	11.	SNR
14.0	15.0	10.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	61.	61.	43.	55.	60.	62.	61.	44.	21.	-10.	-45.	-79.	SNR
18.0	11.6	8.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	60.	60.	47.	57.	61.	55.	44.	23.	-5.	-37.	-69.	-88.	SNR
22.0	18.0	15.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	64.	16.	43.	55.	59.	63.	64.	37.	1.	-45.	-91.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = 13.45, 144.75													
2.0	19.5	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	64.	-94.	-6.	36.	52.	63.	63.	58.	61.	62.	62.	SNR
6.0	16.8	13.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	70.	65.	-2.	41.	58.	64.	67.	65.	63.	62.	59.	54.	SNR
10.0	18.5	12.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	61.	47.	54.	59.	61.	64.	66.	54.	36.	9.	-21.	SNR
14.0	14.0	10.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	62.	58.	36.	51.	56.	61.	54.	33.	-3.	-42.	-53.	-53.	SNR
18.0	10.2	7.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	58.	55.	45.	53.	57.	50.	36.	10.	-21.	-51.	-60.	-60.	SNR
22.0	18.3	14.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	71.	67.	20.	51.	62.	63.	68.	71.	55.	46.	26.	-22.	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = 14.67, 121.05													
2.0	21.5	17.8	3.0	5.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	62.	56.	****	-63.	19.	34.	37.	56.	61.	55.	48.	37.	SNR
6.0	21.1	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	60.	53.	****	-11.	35.	44.	49.	56.	60.	52.	42.	28.	SNR
10.0	25.0	17.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	57.	56.	19.	39.	49.	54.	56.	57.	60.	60.	51.	37.	SNR
14.0	19.1	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	54.	57.	20.	41.	50.	55.	58.	59.	47.	26.	-5.	-43.	SNR
18.0	15.1	11.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	52.	53.	23.	42.	49.	55.	56.	46.	32.	12.	-12.	-40.	SNR
22.0	20.5	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	58.	60.	-12.	30.	44.	54.	58.	61.	52.	19.	-39.	****	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = 17.22, 100.62													
2.0	19.1	15.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	44.	33.	****	****	-10.	20.	27.	41.	33.	47.	-6.	-38.	SNR
6.0	20.6	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	26.	38.	****	****	-8.	19.	28.	39.	3.	52.	****	****	SNR
10.0	23.4	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	47.	49.	-22.	21.	37.	45.	48.	49.	50.	39.	17.	-18.	SNR
14.0	18.3	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	40.	52.	10.	35.	46.	51.	52.	48.	16.	-32.	****	****	SNR
18.0	14.1	10.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	44.	48.	12.	36.	46.	49.	34.	13.	-20.	-66.	****	****	SNR
22.0	14.8	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	43.	44.	-28.	15.	35.	44.	33.	34.	****	****	****	****	SNR
TX LOCATION = -2.47, 140.63													
RX LOCATION = -12.20, 96.90													
2.0	29.8	25.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	49.	53.	****	-92.	-11.	16.	32.	43.	50.	51.	54.	35.	SNR
6.0	29.5	25.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	51.	51.	****	****	-17.	13.	29.	41.	48.	49.	53.	35.	SNR
10.0	25.3	20.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	47.	56.	2.	36.	44.	49.	54.	55.	56.	55.	31.	4.	SNR
14.0	15.2	10.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ



46.	53.	25.	47.	53.	53.	47.	17.	-27.	-89.	****	****	SNR	
18.0	11.2	7.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	51.	29.	48.	50.	35.	7.	-39.	****	****	****	****	SNR	
22.0	9.9	8.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	43.	2.	35.	44.	-19.	****	****	****	****	****	****	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -34.87, 138.50													
2.0	26.1	22.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
30.	45.	****	****	-42.	-5.	15.	31.	43.	47.	23.	-15.	SNR	
6.0	25.9	22.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	53.	****	-23.	14.	27.	40.	47.	51.	53.	26.	-18.	SNR	
10.0	17.7	14.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	51.	23.	31.	44.	50.	51.	34.	-3.	-68.	****	****	SNR	
14.0	13.9	9.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
36.	48.	20.	39.	48.	47.	28.	-10.	-71.	****	****	****	SNR	
18.0	10.4	7.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
33.	45.	22.	41.	45.	22.	-18.	-81.	****	****	****	****	SNR	
22.0	22.6	19.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
36.	55.	-47.	10.	31.	45.	52.	54.	55.	24.	-17.	-80.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -12.33, 130.83													
2.0	27.7	23.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	54.	****	-78.	4.	29.	37.	50.	51.	56.	58.	49.	SNR	
6.0	26.7	21.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	57.	****	-11.	28.	42.	45.	50.	56.	59.	53.	47.	SNR	
10.0	27.5	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	63.	35.	47.	56.	61.	63.	63.	63.	62.	60.	48.	SNR	
14.0	20.4	15.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	63.	38.	55.	61.	64.	63.	62.	53.	36.	9.	-28.	SNR	
18.0	13.9	10.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	59.	39.	53.	59.	59.	50.	37.	17.	-10.	-40.	-71.	SNR	
22.0	23.1	18.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	60.	-18.	30.	47.	55.	59.	60.	60.	48.	15.	-40.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -23.67, 135.83													
2.0	24.1	20.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	46.	****	-78.	-20.	14.	31.	42.	46.	50.	10.	40.	SNR	
6.0	24.3	21.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	54.	****	-8.	27.	39.	46.	52.	54.	56.	15.	-38.	SNR	
10.0	21.2	16.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	59.	35.	43.	53.	58.	60.	59.	53.	22.	44.	-71.	SNR	
14.0	14.8	10.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	55.	27.	46.	53.	55.	42.	17.	-27.	-87.	****	****	SNR	
18.0	9.4	6.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	47.	27.	45.	46.	18.	-29.	-96.	****	****	****	****	SNR	
22.0	19.9	17.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	56.	-47.	25.	39.	50.	55.	56.	32.	-7.	-71.	****	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -19.33, 146.83													
2.0	30.4	26.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	57.	****	-84.	-8.	23.	38.	44.	54.	6.	58.	56.	SNR	
6.0	30.1	26.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	62.	-72.	9.	36.	47.	53.	55.	57.	10.	62.	57.	SNR	
10.0	27.2	21.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

57.	33.	38.	50.	58.	62.	61.	60.	37.	62.	58.	44.	SNR	
14.0	19.6	14.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	42.	34.	52.	59.	58.	37.	59.	47.	26.	-7.	-48.	SNR	
18.0	11.2	7.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	47.	34.	47.	35.	48.	32.	6.	-29.	-68.	****	****	SNR	
22.0	27.5	24.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	-10.	-35.	23.	42.	52.	56.	58.	33.	-6.	58.	43.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -17.30, 123.63													
2.0	32.5	28.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	-14.	****	-78.	-11.	19.	36.	44.	47.	34.	1.	42.	SNR	
6.0	31.0	25.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	27.	****	-22.	16.	32.	39.	47.	49.	34.	18.	55.	SNR	
10.0	22.7	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	60.	31.	44.	54.	59.	60.	60.	59.	39.	12.	55.	SNR	
14.0	16.0	11.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	58.	29.	49.	57.	58.	55.	33.	55.	-45.	****	****	SNR	
18.0	10.8	7.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
43.	52.	31.	50.	52.	36.	7.	-40.	****	****	****	****	SNR	
22.0	16.8	14.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	54.	-33.	27.	43.	52.	55.	30.	-21.	****	****	****	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -2.47, 140.63													
2.0	19.5	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	63.	-94.	-5.	37.	51.	62.	63.	58.	61.	62.	62.	SNR	
6.0	16.8	13.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
69.	65.	-8.	42.	59.	64.	66.	64.	63.	62.	59.	54.	SNR	
10.0	18.5	12.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
67.	63.	52.	58.	63.	63.	65.	67.	54.	36.	9.	-21.	SNR	
14.0	14.0	10.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	61.	45.	57.	60.	63.	55.	34.	-3.	-42.	-53.	-53.	SNR	
18.0	10.2	7.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	59.	49.	57.	61.	53.	37.	11.	-20.	-51.	-60.	-60.	SNR	
22.0	18.3	14.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
71.	68.	19.	52.	62.	63.	68.	71.	55.	46.	26.	-22.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = 14.67, 121.05													
2.0	17.8	15.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	56.	****	-31.	29.	22.	55.	54.	19.	15.	5.	-14.	SNR	
6.0	20.7	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	54.	****	-8.	36.	45.	51.	56.	54.	49.	40.	25.	SNR	
10.0	24.2	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	57.	21.	41.	50.	55.	57.	58.	61.	62.	50.	35.	SNR	
14.0	15.5	11.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	53.	23.	43.	50.	54.	58.	43.	15.	-24.	-64.	-71.	SNR	
18.0	14.2	10.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	52.	22.	41.	49.	55.	52.	44.	28.	6.	-20.	-47.	SNR	
22.0	19.5	15.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	60.	-21.	30.	45.	56.	59.	62.	45.	0.	-61.	-92.	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = 17.22, 100.62													
2.0	23.9	19.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	20.	****	****	-6.	21.	35.	13.	16.	46.	41.	33.	SNR	
6.0	21.1	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

44.	36.	****	****	-11.	18.	33.	38.	44.	27.	46.	-19.	SNR	
10.0	24.8	17.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	49.	-23.	18.	36.	44.	48.	50.	51.	50.	31.	5.	SNR	
14.0	15.2	11.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	48.	14.	36.	46.	48.	47.	12.	-48.	****	****	****	SNR	
18.0	14.5	10.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	49.	12.	35.	46.	50.	38.	21.	-8.	-48.	-96.	****	SNR	
22.0	15.3	11.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	42.	-43.	11.	32.	42.	45.	-18.	****	****	****	****	SNR	
TX LOCATION = 13.45, 144.75													
RX LOCATION = -12.20, 96.90													
2.0	23.3	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	29.	****	****	-33.	7.	24.	33.	34.	30.	19.	1.	SNR	
6.0	22.3	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	28.	****	****	-24.	8.	21.	27.	38.	25.	39.	-15.	SNR	
10.0	25.9	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	50.	-13.	15.	35.	43.	48.	50.	51.	49.	34.	11.	SNR	
14.0	19.3	14.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	53.	15.	36.	48.	53.	53.	49.	22.	-22.	-90.	****	SNR	
18.0	13.1	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
35.	49.	20.	39.	48.	45.	22.	-8.	-54.	****	****	****	SNR	
22.0	10.2	8.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
24.	29.	-26.	17.	32.	-58.	****	****	****	****	****	****	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -34.87, 138.50													
2.0	28.5	24.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
31.	48.	****	****	-30.	1.	18.	34.	45.	48.	48.	18.	SNR	
6.0	28.8	25.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
33.	51.	****	-72.	-11.	11.	29.	42.	48.	50.	51.	23.	SNR	
10.0	19.4	15.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
36.	51.	10.	23.	40.	48.	51.	48.	22.	-22.	-90.	****	SNR	
14.0	14.3	10.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
35.	48.	19.	39.	48.	47.	30.	-5.	-63.	****	****	****	SNR	
18.0	13.5	10.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
35.	50.	18.	40.	49.	48.	26.	-2.	-44.	-99.	****	****	SNR	
22.0	16.1	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
33.	44.	-19.	24.	34.	43.	45.	-12.	****	****	****	****	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -12.33, 130.83													
2.0	28.4	23.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	55.	****	-57.	11.	34.	40.	52.	52.	56.	59.	51.	SNR	
6.0	26.8	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	57.	****	-40.	21.	39.	44.	51.	56.	59.	53.	48.	SNR	
10.0	28.6	19.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	62.	27.	45.	55.	60.	62.	63.	63.	62.	61.	53.	SNR	
14.0	21.3	15.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	63.	40.	54.	62.	64.	63.	63.	60.	44.	21.	-10.	SNR	
18.0	15.5	11.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	61.	42.	56.	61.	61.	59.	47.	33.	14.	-10.	-37.	SNR	
22.0	17.4	13.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	59.	10.	42.	52.	56.	59.	47.	-1.	-78.	****	****	SNR	
TX LOCATION = 14.67, 121.05													
RX LOCATION = -23.67, 135.83													
2.0	26.9	23.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

50.	49.	****	-61.	-13.	13.	29.	41.	47.	50.	50.	9.	SNR	
6.0	27.2	23.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	53.	****	-38.	0.	22.	36.	46.	51.	53.	54.	15.	SNR	
10.0	23.6	18.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	58.	15.	35.	49.	55.	59.	59.	58.	41.	17.	-20.	SNR	
14.0	15.4	10.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	55.	25.	44.	53.	54.	50.	22.	-18.	-74.	****	****	SNR	
18.0	11.0	7.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	49.	28.	45.	49.	34.	5.	-42.	****	****	****	****	SNR	
22.0	14.6	11.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	46.	-16.	29.	42.	47.	32.	-69.	****	****	****	****	SNR	

TX LOCATION = 14.67, 121.05

RX LOCATION = -19.33, 146.83

2.0	26.1	22.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	45.	****	****	-26.	9.	27.	38.	42.	48.	31.	-2.	SNR	
6.0	23.0	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	41.	****	-72.	5.	30.	38.	43.	46.	35.	22.	52.	SNR	
10.0	23.8	18.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	58.	15.	38.	51.	57.	59.	59.	58.	42.	19.	-17.	SNR	
14.0	16.4	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
43.	56.	25.	47.	55.	56.	53.	32.	0.	-48.	****	****	SNR	
18.0	10.8	7.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	49.	26.	46.	49.	32.	1.	-49.	****	****	****	****	SNR	
22.0	17.4	13.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
47.	48.	-36.	23.	40.	47.	50.	31.	-52.	****	****	****	SNR	

TX LOCATION = 14.67, 121.05

RX LOCATION = -17.30, 123.63

2.0	32.1	27.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	60.	****	-50.	7.	31.	42.	47.	56.	26.	59.	60.	SNR	
6.0	31.3	27.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	60.	****	-49.	13.	34.	43.	51.	57.	58.	60.	60.	SNR	
10.0	31.0	24.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	30.	23.	43.	53.	59.	61.	61.	59.	34.	63.	60.	SNR	
14.0	21.6	15.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	42.	34.	52.	59.	59.	56.	61.	58.	43.	21.	-11.	SNR	
18.0	15.0	11.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	43.	40.	54.	56.	38.	56.	43.	28.	6.	-21.	-51.	SNR	
22.0	15.2	13.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	58.	14.	42.	48.	21.	55.	26.	-24.	-86.	****	****	SNR	

TX LOCATION = 14.67, 121.05

RX LOCATION = -2.47, 140.63

2.0	21.5	17.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	56.	****	-62.	21.	36.	37.	57.	63.	56.	49.	37.	SNR	
6.0	21.1	17.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	54.	****	-15.	34.	43.	49.	57.	62.	53.	43.	28.	SNR	
10.0	25.0	17.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	61.	28.	43.	52.	57.	60.	61.	63.	62.	52.	38.	SNR	
14.0	19.1	14.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
56.	61.	33.	50.	57.	60.	62.	62.	48.	27.	-5.	-43.	SNR	
18.0	15.1	11.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	60.	37.	51.	58.	60.	58.	46.	32.	12.	-12.	-40.	SNR	
22.0	20.5	16.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	61.	-1.	39.	50.	57.	60.	62.	53.	20.	-38.	****	SNR	

TX LOCATION = 14.67, 121.05

RX LOCATION = 13.45, 144.75

2.0	17.8	15.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	56.	****	-30.	30.	23.	56.	55.	19.	15.	5.	-14.		SNR
6.0	20.7	17.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
63.	57.	****	-9.	36.	46.	53.	59.	57.	51.	40.	25.		SNR
10.0	24.2	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
59.	61.	25.	42.	52.	57.	60.	62.	64.	64.	51.	35.		SNR
14.0	15.5	11.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
60.	56.	27.	45.	52.	57.	60.	45.	16.	-24.	-64.	-71.		SNR
18.0	14.2	10.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	56.	33.	47.	54.	59.	54.	44.	28.	6.	-20.	-47.		SNR
22.0	19.5	15.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
62.	61.	-9.	38.	50.	58.	60.	63.	45.	1.	-61.	-91.		SNR

TX LOCATION = 14.67, 121.05

RX LOCATION = 17.22, 100.62

2.0	17.7	15.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
68.	67.	****	19.	42.	60.	66.	53.	56.	55.	52.	46.		SNR
6.0	20.1	17.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
57.	60.	****	-8.	27.	41.	56.	61.	47.	49.	49.	47.		SNR
10.0	24.3	19.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
66.	62.	1.	42.	53.	54.	58.	60.	64.	66.	55.	44.		SNR
14.0	16.2	11.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	60.	37.	47.	55.	60.	63.	56.	45.	36.	20.	-8.		SNR
18.0	14.1	10.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
61.	61.	38.	48.	56.	63.	59.	50.	43.	29.	2.	-49.		SNR
22.0	12.5	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
64.	59.	25.	52.	56.	63.	56.	51.	44.	30.	3.	-51.		SNR

TX LOCATION = 14.67, 121.05

RX LOCATION = -12.20, 96.90

2.0	32.5	26.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	5.	****	-29.	12.	31.	40.	46.	51.	33.	-15.	58.		SNR
6.0	30.7	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	21.	****	-84.	-17.	11.	26.	33.	42.	27.	53.	53.		SNR
10.0	32.0	26.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	31.	-4.	33.	35.	43.	49.	52.	55.	41.	27.	59.		SNR
14.0	24.0	16.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	54.	26.	46.	53.	56.	56.	50.	14.	55.	41.	20.		SNR
18.0	17.0	12.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	51.	29.	48.	54.	53.	11.	47.	22.	-20.	-69.	****		SNR
22.0	11.1	8.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	39.	23.	37.	30.	45.	28.	-1.	-40.	-81.	****	****		SNR

TX LOCATION = 17.22, 100.62

RX LOCATION = -34.87, 138.50

2.0	30.4	26.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
31.	7.	****	****	-33.	-2.	19.	33.	39.	42.	-5.	36.		SNR
6.0	30.8	26.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
29.	1.	****	****	-57.	-20.	5.	27.	35.	39.	-3.	40.		SNR
10.0	20.4	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
31.	39.	-35.	2.	26.	38.	41.	46.	26.	-10.	-70.	****		SNR
14.0	14.8	10.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
32.	39.	10.	28.	39.	45.	30.	-2.	-57.	****	****	****		SNR
18.0	16.0	11.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
34.	42.	10.	35.	43.	40.	42.	23.	-1.	-35.	-79.	****		SNR
22.0	11.6	8.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

	25.	35.	-16.	24.	36.	23.	-5.	-55.	****	****	****	****	SNR	
TX LOCATION =	17.22,	100.62												
RX LOCATION =	-12.33,	130.83												
2.0	22.4	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
45.	36.	****	-42.	-1.	16.	35.	37.	44.	20.	-39.	51.	SNR		
6.0	27.8	23.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
48.	19.	****	-76.	-21.	5.	23.	36.	27.	15.	49.	42.	SNR		
10.0	23.5	19.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
49.	52.	-16.	27.	34.	40.	47.	51.	53.	39.	25.	43.	SNR		
14.0	18.7	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
41.	55.	23.	38.	50.	54.	55.	50.	21.	-24.	-89.	****	SNR		
18.0	13.3	9.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
39.	52.	25.	41.	51.	51.	18.	-40.	****	****	****	****	SNR		
22.0	11.3	8.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
35.	42.	3.	34.	43.	31.	6.	-36.	****	****	****	****	SNR		
TX LOCATION =	17.22,	100.62												
RX LOCATION =	-23.67,	135.83												
2.0	31.8	27.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
33.	51.	****	-97.	-20.	8.	21.	32.	44.	49.	51.	51.	SNR		
6.0	24.5	20.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
38.	30.	****	****	-42.	-1.	17.	28.	31.	38.	22.	40.	SNR		
10.0	25.9	20.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
37.	55.	-15.	12.	35.	47.	52.	55.	55.	51.	30.	2.	SNR		
14.0	16.1	11.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
36.	50.	17.	32.	47.	50.	46.	22.	-15.	-71.	****	****	SNR		
18.0	12.7	8.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
33.	46.	20.	34.	46.	41.	18.	-14.	-62.	****	****	****	SNR		
22.0	12.0	9.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
30.	38.	-2.	26.	38.	30.	6.	-36.	-97.	****	****	****	SNR		
TX LOCATION =	17.22,	100.62												
RX LOCATION =	-19.33,	146.83												
2.0	25.3	20.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
37.	33.	****	****	-44.	-5.	16.	28.	33.	38.	13.	-43.	SNR		
6.0	23.0	19.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
36.	28.	****	****	-40.	-2.	22.	30.	34.	25.	13.	-5.	SNR		
10.0	26.3	20.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
36.	55.	-33.	8.	32.	43.	49.	55.	54.	51.	32.	7.	SNR		
14.0	17.5	12.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
36.	51.	16.	31.	47.	51.	49.	33.	6.	-37.	-95.	****	SNR		
18.0	12.8	9.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
32.	44.	17.	32.	45.	40.	17.	-16.	-65.	****	****	****	SNR		
22.0	14.7	11.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
31.	41.	-39.	19.	33.	42.	29.	9.	-24.	-71.	****	****	SNR		
TX LOCATION =	17.22,	100.62												
RX LOCATION =	-17.30,	123.63												
2.0	24.5	19.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
45.	38.	****	-31.	3.	16.	35.	37.	42.	46.	8.	-55.	SNR		
6.0	30.6	25.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
45.	20.	****	-80.	-24.	-1.	17.	33.	37.	25.	13.	49.	SNR		
10.0	26.2	22.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
52.	58.	-21.	17.	34.	45.	52.	55.	57.	58.	35.	0.	SNR		
14.0	17.6	13.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	
40.	56.	23.	37.	49.	54.	56.	38.	3.	-55.	****	****	SNR		
18.0	12.0	8.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ	

	38.	48.	26.	39.	49.	43.	44.	-57.	****	****	****	****	SNR
22.0	9.1	6.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	38.	44.	20.	45.	40.	17.	-6.	-60.	****	****	****	****	SNR
TX LOCATION = 17.22, 100.62													
RX LOCATION = -2.47, 140.63													
2.0	19.1	15.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	48.	37.	****	****	-1.	26.	35.	46.	18.	42.	****	****	SNR
6.0	20.6	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	31.	44.	****	****	-2.	23.	34.	44.	5.	55.	****	****	SNR
10.0	23.4	16.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	48.	50.	-18.	14.	33.	43.	49.	51.	52.	40.	18.	-18.	SNR
14.0	18.3	13.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	42.	55.	14.	39.	49.	54.	55.	50.	17.	-32.	****	****	SNR
18.0	14.1	10.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	44.	48.	17.	34.	45.	49.	29.	-26.	****	****	****	****	SNR
22.0	14.8	11.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	43.	46.	-17.	25.	41.	46.	36.	41.	-8.	-48.	-97.	****	SNR
TX LOCATION = 17.22, 100.62													
RX LOCATION = 13.45, 144.75													
2.0	23.9	18.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	46.	32.	****	****	-6.	20.	34.	12.	9.	46.	39.	26.	SNR
6.0	21.1	16.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	46.	37.	****	****	-11.	19.	34.	41.	46.	24.	46.	-42.	SNR
10.0	24.8	18.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	51.	53.	-24.	11.	32.	43.	49.	53.	54.	52.	33.	12.	SNR
14.0	15.2	11.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	47.	48.	9.	31.	44.	48.	49.	13.	-48.	****	****	****	SNR
18.0	14.5	11.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	39.	49.	14.	34.	45.	49.	37.	18.	-15.	-61.	****	****	SNR
22.0	15.3	11.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	45.	46.	-31.	20.	38.	46.	46.	23.	-5.	-46.	-97.	****	SNR
TX LOCATION = 17.22, 100.62													
RX LOCATION = 14.67, 121.05													
2.0	17.7	15.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	67.	66.	****	20.	43.	60.	66.	53.	55.	55.	52.	46.	SNR
6.0	20.1	17.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	60.	****	-6.	27.	40.	55.	60.	46.	48.	49.	47.	SNR
10.0	24.3	19.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	66.	62.	-4.	37.	50.	52.	57.	60.	64.	66.	55.	44.	SNR
14.0	16.2	11.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	63.	58.	28.	41.	51.	58.	62.	55.	45.	35.	20.	-8.	SNR
18.0	14.1	10.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	60.	58.	30.	42.	52.	60.	58.	50.	43.	29.	2.	-49.	SNR
22.0	12.5	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	63.	59.	25.	53.	56.	63.	56.	51.	44.	30.	3.	-51.	SNR
TX LOCATION = 17.22, 100.62													
RX LOCATION = -12.20, 96.90													
2.0	30.0	24.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	54.	61.	-88.	-2.	27.	39.	48.	55.	57.	60.	62.	54.	SNR
6.0	27.3	22.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	56.	54.	****	-95.	-11.	19.	30.	45.	50.	56.	57.	47.	SNR
10.0	29.6	24.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
	55.	62.	-24.	26.	39.	46.	52.	57.	60.	62.	62.	55.	SNR
14.0	25.0	17.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

55.	63.	31.	43.	51.	55.	62.	62.	62.	59.	48.	32.	SNR	
18.0	18.6	13.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	38.	47.	55.	62.	62.	59.	42.	15.	-24.	-67.	SNR	
22.0	10.5	7.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	53.	34.	47.	55.	45.	25.	-8.	-48.	-90.	****	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -34.87, 138.50													
2.0	24.3	21.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	52.	****	-30.	14.	29.	41.	50.	52.	49.	12.	-28.	SNR	
6.0	24.9	18.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	44.	****	-59.	-10.	12.	29.	43.	47.	45.	21.	-9.	SNR	
10.0	16.5	12.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	50.	8.	33.	45.	50.	50.	26.	-12.	-71.	****	****	SNR	
14.0	11.7	9.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	50.	31.	45.	50.	35.	4.	-49.	****	****	****	****	SNR	
18.0	12.5	9.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	53.	30.	46.	52.	48.	18.	-21.	-77.	****	****	****	SNR	
22.0	9.7	6.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
39.	43.	24.	42.	42.	13.	-35.	****	****	****	****	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -12.33, 130.83													
2.0	34.0	29.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	-9.	****	-17.	23.	38.	47.	53.	55.	57.	25.	-10.	SNR	
6.0	35.5	30.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	-19.	****	-49.	6.	27.	40.	49.	52.	55.	28.	-10.	SNR	
10.0	26.9	23.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	-20.	19.	39.	52.	59.	59.	60.	27.	-36.	53.	34.	SNR	
14.0	16.3	12.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	32.	39.	54.	56.	42.	58.	43.	12.	-34.	-85.	****	SNR	
18.0	13.6	9.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	51.	43.	53.	53.	57.	46.	22.	-15.	-59.	****	****	SNR	
22.0	11.6	8.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	46.	33.	45.	35.	48.	34.	10.	-24.	-62.	****	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -23.67, 135.83													
2.0	25.3	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	54.	****	-17.	14.	36.	45.	51.	53.	55.	27.	-3.	SNR	
6.0	25.6	19.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	47.	****	-42.	-3.	24.	35.	45.	49.	49.	30.	6.	SNR	
10.0	18.0	13.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
48.	55.	12.	36.	50.	54.	56.	49.	17.	-23.	-79.	****	SNR	
14.0	11.9	9.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	54.	35.	50.	54.	40.	13.	-35.	****	****	****	****	SNR	
18.0	11.6	9.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	54.	38.	51.	54.	40.	43.	-34.	-96.	****	****	****	SNR	
22.0	9.5	6.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	46.	29.	46.	46.	17.	-32.	****	****	****	****	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -19.33, 146.83													
2.0	28.1	21.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
33.	48.	****	-73.	-7.	16.	27.	37.	48.	49.	45.	21.	SNR	
6.0	28.4	21.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	48.	****	-87.	-16.	11.	29.	42.	47.	49.	46.	26.	SNR	
10.0	19.3	15.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ



37.	54.	5.	25.	44.	51.	54.	51.	28.	7.	-24.	-64.	SNR	
14.0	13.9	11.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	52.	19.	41.	51.	52.	24.	-40.	****	****	****	****	SNR	
18.0	12.8	9.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	51.	26.	45.	50.	47.	15.	-39.	****	****	****	****	SNR	
22.0	10.9	7.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
32.	42.	5.	36.	43.	25.	-8.	-62.	****	****	****	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -17.30, 123.63													
2.0	30.9	27.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	65.	-82.	7.	35.	48.	57.	58.	64.	63.	64.	63.	SNR	
6.0	31.6	23.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	60.	****	-43.	12.	34.	44.	51.	58.	60.	61.	60.	SNR	
10.0	23.9	18.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	63.	23.	46.	55.	61.	63.	63.	63.	55.	45.	30.	SNR	
14.0	14.7	11.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	61.	44.	56.	60.	62.	54.	41.	21.	-7.	-40.	-73.	SNR	
18.0	12.7	9.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	60.	47.	58.	60.	59.	43.	14.	-26.	-70.	****	****	SNR	
22.0	10.0	7.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	53.	43.	53.	55.	44.	22.	-13.	-53.	-93.	****	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = -2.47, 140.63													
2.0	29.8	26.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
50.	53.	****	-91.	-8.	17.	32.	43.	50.	51.	54.	36.	SNR	
6.0	29.5	25.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
51.	52.	****	****	-17.	12.	28.	42.	47.	49.	53.	35.	SNR	
10.0	25.3	22.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
49.	58.	-2.	31.	40.	49.	55.	57.	57.	58.	25.	-23.	SNR	
14.0	15.2	12.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
45.	52.	17.	42.	51.	52.	47.	4.	-68.	****	****	****	SNR	
18.0	11.2	8.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
44.	48.	28.	45.	48.	32.	-15.	-96.	****	****	****	****	SNR	
22.0	9.9	6.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
37.	39.	9.	36.	40.	16.	-27.	-94.	****	****	****	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = 13.45, 144.75													
2.0	23.3	19.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
42.	34.	****	****	-28.	11.	26.	36.	39.	31.	20.	2.	SNR	
6.0	22.3	18.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	34.	****	****	-22.	11.	26.	33.	41.	27.	40.	-14.	SNR	
10.0	25.9	17.9	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
40.	50.	-23.	7.	29.	40.	47.	51.	51.	49.	34.	11.	SNR	
14.0	19.3	15.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
38.	53.	-2.	27.	42.	50.	53.	50.	22.	-23.	-91.	****	SNR	
18.0	13.1	9.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
33.	42.	11.	35.	42.	42.	16.	-34.	****	****	****	****	SNR	
22.0	10.2	7.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
26.	29.	-19.	23.	33.	12.	-30.	-98.	****	****	****	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = 14.67, 121.05													
2.0	32.5	28.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
52.	-9.	****	-31.	14.	34.	43.	49.	53.	36.	11.	61.	SNR	
6.0	30.7	25.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ

50.	21.	****	-84.	-12.	13.	30.	36.	43.	27.	56.	55.	SNR	
10.0	32.0	26.3	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	31.	-17.	22.	31.	42.	47.	50.	54.	40.	27.	60.	SNR	
14.0	24.0	16.6	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	51.	5.	30.	42.	49.	51.	47.	12.	54.	40.	20.	SNR	
18.0	17.0	12.1	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
53.	45.	8.	33.	42.	45.	19.	48.	32.	7.	-26.	-63.	SNR	
22.0	11.1	7.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	36.	16.	33.	25.	42.	28.	1.	-36.	-76.	****	****	SNR	
TX LOCATION = -12.20, 96.90													
RX LOCATION = 17.22, 100.62													
2.0	30.0	26.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	63.	-89.	-4.	27.	39.	52.	58.	60.	62.	63.	54.	SNR	
6.0	27.3	23.5	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
58.	55.	****	-97.	-9.	22.	33.	46.	51.	56.	58.	41.	SNR	
10.0	29.6	25.8	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	63.	-32.	22.	37.	47.	52.	56.	58.	61.	63.	54.	SNR	
14.0	25.0	19.7	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
55.	62.	20.	35.	46.	51.	59.	61.	63.	60.	48.	32.	SNR	
18.0	18.6	13.2	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
54.	58.	25.	37.	46.	57.	60.	58.	46.	30.	6.	-24.	SNR	
22.0	10.5	7.4	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	FREQ
46.	46.	27.	42.	49.	43.	26.	-5.	-44.	-85.	****	****	SNR	

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 6  
 Sunspot Number = 50.00

Time-of-day (UT) = 2  
 Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-999.0	-14.0	-34.0	-97.0	-999.0	-999.0	-999.0	-999.0	-999.0
Darwin	-999.0	500.0	-33.0	-53.0	-15.0	-64.0	-999.0	-999.0	-999.0	-999.0
ASprin	-14.0	-33.0	500.0	-30.0	-26.0	-999.0	-999.0	-999.0	-999.0	-999.0
TownsV	-34.0	-53.0	-30.0	500.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0
Derby	-97.0	-15.0	-26.0	-999.0	500.0	-999.0	-999.0	-999.0	-999.0	-83.0
Jayapu	-999.0	-64.0	-999.0	-999.0	-999.0	500.0	-94.0	-999.0	-999.0	-999.0
Guam	-999.0	-999.0	-999.0	-999.0	-999.0	-94.0	500.0	-999.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-88.0
Cocos	-999.0	-999.0	-999.0	-999.0	-82.0	-999.0	-999.0	-999.0	-89.0	500.0

Time-of-day (UT) = 2  
 Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-17.0	38.0	23.0	-5.0	-43.0	-999.0	-999.0	-999.0	-31.0
Darwin	-17.0	500.0	29.0	13.0	39.0	11.0	-79.0	-59.0	-44.0	-17.0
ASprin	38.0	29.0	500.0	32.0	31.0	-32.0	-79.0	-62.0	-99.0	-17.0
TownsV	23.0	13.0	32.0	500.0	-24.0	4.0	-84.0	-999.0	-999.0	-74.0
Derby	-5.0	39.0	31.0	-24.0	500.0	-27.0	-78.0	-51.0	-34.0	8.0
Jayapu	-43.0	11.0	-32.0	4.0	-27.0	500.0	-6.0	-63.0	-999.0	-92.0
Guam	-999.0	-78.0	-78.0	-84.0	-78.0	-5.0	500.0	-31.0	-999.0	-999.0
Manila	-999.0	-57.0	-61.0	-999.0	-50.0	-62.0	-30.0	500.0	19.0	-29.0
Songkh	-999.0	-42.0	-97.0	-999.0	-31.0	-999.0	-999.0	20.0	500.0	-2.0
Cocos	-30.0	-17.0	-17.0	-73.0	7.0	-91.0	-999.0	-31.0	-4.0	500.0

Time-of-day (UT) = 2  
 Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	19.0	58.0	44.0	33.0	6.0	-42.0	-30.0	-35.0	13.0
Darwin	19.0	500.0	48.0	39.0	59.0	43.0	8.0	15.0	-3.0	21.0
ASprin	58.0	48.0	500.0	51.0	49.0	14.0	-20.0	-13.0	-22.0	14.0
TownsV	44.0	39.0	51.0	500.0	15.0	35.0	-8.0	-23.0	-43.0	-7.0
Derby	33.0	59.0	49.0	15.0	500.0	13.0	-9.0	9.0	1.0	34.0
Jayapu	7.0	43.0	15.0	35.0	13.0	500.0	36.0	19.0	-10.0	-11.0
Guam	-42.0	4.0	-20.0	-8.0	-11.0	37.0	500.0	29.0	-6.0	-33.0
Manila	-30.0	11.0	-13.0	-26.0	7.0	21.0	30.0	500.0	42.0	12.0
Songkh	-33.0	-1.0	-20.0	-44.0	3.0	-1.0	-6.0	43.0	500.0	27.0
Cocos	14.0	23.0	14.0	-7.0	35.0	-8.0	-28.0	14.0	27.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	34.0	63.0	52.0	43.0	25.0	-5.0	1.0	-1.0	29.0
Darwin	34.0	500.0	59.0	50.0	64.0	55.0	33.0	37.0	16.0	38.0
ASprin	62.0	59.0	500.0	63.0	59.0	37.0	14.0	13.0	7.0	36.0
TownsV	52.0	50.0	63.0	500.0	32.0	48.0	24.0	11.0	-3.0	17.0
Derby	42.0	64.0	59.0	32.0	500.0	33.0	21.0	32.0	18.0	48.0
Jayapu	25.0	56.0	37.0	49.0	34.0	500.0	52.0	34.0	20.0	16.0
Guam	-5.0	29.0	14.0	23.0	19.0	51.0	500.0	22.0	21.0	7.0
Manila	1.0	34.0	13.0	9.0	31.0	36.0	23.0	500.0	60.0	31.0
Songkh	-2.0	16.0	8.0	-5.0	16.0	26.0	20.0	60.0	500.0	39.0
Cocos	29.0	38.0	36.0	16.0	48.0	17.0	11.0	34.0	39.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	46.0	65.0	56.0	54.0	33.0	15.0	18.0	20.0	41.0
Darwin	44.0	500.0	64.0	56.0	69.0	60.0	41.0	44.0	35.0	47.0
ASprin	65.0	63.0	500.0	66.0	63.0	44.0	32.0	29.0	21.0	45.0
TownsV	55.0	56.0	66.0	500.0	44.0	53.0	40.0	29.0	20.0	27.0
Derby	54.0	69.0	63.0	44.0	500.0	45.0	37.0	44.0	36.0	58.0
Jayapu	33.0	61.0	46.0	54.0	47.0	500.0	63.0	37.0	27.0	32.0
Guam	15.0	37.0	31.0	38.0	36.0	62.0	500.0	55.0	35.0	24.0
Manila	18.0	40.0	29.0	27.0	42.0	37.0	56.0	500.0	66.0	40.0
Songkh	19.0	35.0	21.0	16.0	35.0	35.0	34.0	66.0	500.0	48.0
Cocos	41.0	47.0	45.0	27.0	57.0	32.0	26.0	43.0	52.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	44.0	47.0	63.0	60.0	45.0	31.0	32.0	33.0	50.0
Darwin	44.0	500.0	67.0	62.0	48.0	65.0	52.0	53.0	36.0	54.0
ASprin	47.0	67.0	500.0	53.0	66.0	48.0	42.0	41.0	34.0	50.0
TownsV	62.0	62.0	53.0	500.0	46.0	60.0	45.0	40.0	32.0	38.0
Derby	60.0	48.0	66.0	46.0	500.0	52.0	45.0	48.0	42.0	58.0
Jayapu	45.0	65.0	49.0	60.0	53.0	500.0	63.0	56.0	41.0	43.0
Guam	31.0	50.0	42.0	44.0	44.0	63.0	500.0	54.0	13.0	33.0
Manila	34.0	52.0	41.0	38.0	47.0	57.0	55.0	500.0	53.0	46.0
Songkh	33.0	37.0	32.0	28.0	37.0	46.0	12.0	53.0	500.0	55.0
Cocos	50.0	53.0	51.0	37.0	58.0	43.0	36.0	49.0	58.0	500.0

Time-of-day (UT) = 2

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	61.0	16.0	53.0	63.0	31.0	43.0	44.0	38.0	52.0
Darwin	60.0	500.0	51.0	64.0	15.0	58.0	54.0	55.0	44.0	55.0

ASprin	16.0	51.0	500.0	32.0	54.0	60.0	47.0	46.0	45.0	52.0
TownsV	53.0	64.0	32.0	500.0	60.0	64.0	55.0	44.0	38.0	48.0
Derby	62.0	15.0	54.0	60.0	500.0	60.0	49.0	57.0	47.0	63.0
Jayapu	32.0	58.0	60.0	64.0	60.0	500.0	58.0	61.0	33.0	50.0
Guam	43.0	51.0	46.0	54.0	47.0	58.0	500.0	19.0	16.0	34.0
Manila	45.0	52.0	47.0	42.0	56.0	63.0	19.0	500.0	56.0	51.0
Songkh	39.0	44.0	44.0	33.0	42.0	18.0	9.0	55.0	500.0	57.0
Cocos	52.0	55.0	53.0	48.0	64.0	50.0	39.0	53.0	60.0	500.0

Time-of-day (UT) = 2  
Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	62.0	-23.0	33.0	62.0	-1.0	45.0	47.0	39.0	46.0
Darwin	60.0	500.0	30.0	51.0	-22.0	40.0	58.0	59.0	20.0	57.0
ASprin	-23.0	30.0	500.0	1.0	36.0	63.0	50.0	49.0	48.0	51.0
TownsV	33.0	51.0	1.0	500.0	61.0	51.0	6.0	49.0	43.0	49.0
Derby	62.0	-22.0	36.0	61.0	500.0	63.0	34.0	26.0	51.0	63.0
Jayapu	7.0	40.0	63.0	51.0	63.0	500.0	61.0	55.0	47.0	51.0
Guam	47.0	56.0	50.0	6.0	34.0	61.0	500.0	15.0	46.0	30.0
Manila	48.0	56.0	50.0	48.0	26.0	56.0	15.0	500.0	55.0	33.0
Songkh	42.0	20.0	49.0	38.0	46.0	42.0	46.0	55.0	500.0	60.0
Cocos	49.0	57.0	55.0	49.0	63.0	51.0	31.0	36.0	62.0	500.0

Time-of-day (UT) = 2  
Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	48.0	-42.0	1.0	43.0	57.0	24.0	45.0	-2.0	9.0
Darwin	49.0	500.0	2.0	34.0	-22.0	9.0	59.0	61.0	-39.0	25.0
ASprin	-42.0	2.0	500.0	-30.0	9.0	50.0	10.0	46.0	48.0	28.0
TownsV	1.0	34.0	-30.0	500.0	50.0	30.0	59.0	31.0	18.0	45.0
Derby	43.0	-22.0	9.0	50.0	500.0	63.0	1.0	60.0	20.0	64.0
Jayapu	56.0	9.0	50.0	30.0	63.0	500.0	62.0	48.0	-6.0	54.0
Guam	23.0	58.0	10.0	58.0	1.0	62.0	500.0	5.0	41.0	19.0
Manila	48.0	59.0	50.0	31.0	59.0	49.0	5.0	500.0	52.0	-15.0
Songkh	-5.0	-39.0	51.0	13.0	8.0	-999.0	39.0	52.0	500.0	62.0
Cocos	12.0	25.0	27.0	45.0	64.0	54.0	20.0	11.0	63.0	500.0

Time-of-day (UT) = 2  
Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	29.0	-42.0	-38.0	20.0	46.0	-8.0	20.0	35.0	-39.0
Darwin	35.0	500.0	-28.0	9.0	-21.0	-27.0	43.0	47.0	51.0	-10.0
ASprin	-42.0	-28.0	500.0	-37.0	-22.0	31.0	40.0	18.0	45.0	0.0
TownsV	-38.0	9.0	-37.0	500.0	37.0	-4.0	56.0	-2.0	-21.0	21.0
Derby	20.0	-21.0	-22.0	37.0	500.0	46.0	42.0	61.0	-12.0	63.0
Jayapu	47.0	-27.0	31.0	-4.0	46.0	500.0	62.0	37.0	-38.0	35.0
Guam	-15.0	49.0	40.0	56.0	42.0	62.0	500.0	-14.0	33.0	1.0
Manila	18.0	51.0	9.0	-2.0	60.0	37.0	-14.0	500.0	46.0	58.0

Songkh	36.0	51.0	51.0	-43.0	-55.0	-999.0	26.0	46.0	500.0	54.0
Cocos	-28.0	-10.0	-3.0	21.0	63.0	36.0	2.0	61.0	54.0	500.0

Time-of-day (UT) = 6  
Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-53.0	24.0	21.0	-55.0	-57.0	-999.0	-999.0	-999.0	-999.0
Darwin	-53.0	500.0	1.0	1.0	0.0	-12.0	-999.0	-999.0	-999.0	-999.0
ASprin	24.0	1.0	500.0	24.0	-5.0	-60.0	-999.0	-999.0	-999.0	-999.0
TownsV	21.0	1.0	24.0	500.0	-61.0	-31.0	-67.0	-999.0	-999.0	-999.0
Derby	-55.0	0.0	-5.0	-61.0	500.0	-97.0	-999.0	-999.0	-999.0	-999.0
Jayapu	-57.0	-12.0	-60.0	-31.0	-97.0	500.0	-2.0	-999.0	-999.0	-999.0
Guam	-999.0	-999.0	-999.0	-72.0	-999.0	-8.0	500.0	-999.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0	-999.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0

Time-of-day (UT) = 6  
Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	17.0	54.0	51.0	16.0	12.0	-23.0	-72.0	-999.0	-57.0
Darwin	16.0	500.0	44.0	42.0	45.0	39.0	-10.0	-40.0	-77.0	-49.0
ASprin	54.0	44.0	500.0	55.0	42.0	15.0	-9.0	-37.0	-999.0	-42.0
TownsV	51.0	42.0	55.0	500.0	13.0	43.0	8.0	-73.0	-999.0	-87.0
Derby	16.0	45.0	42.0	13.0	500.0	5.0	-23.0	-49.0	-81.0	-43.0
Jayapu	12.0	39.0	15.0	43.0	6.0	500.0	41.0	-11.0	-999.0	-999.0
Guam	-23.0	-11.0	-8.0	9.0	-22.0	42.0	500.0	-8.0	-999.0	-999.0
Manila	-72.0	-40.0	-38.0	-72.0	-49.0	-15.0	-9.0	500.0	-8.0	-84.0
Songkh	-999.0	-76.0	-999.0	-999.0	-80.0	-999.0	-999.0	-6.0	500.0	-95.0
Cocos	-59.0	-49.0	-42.0	-87.0	-43.0	-999.0	-999.0	-84.0	-97.0	500.0

Time-of-day (UT) = 6  
Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	39.0	65.0	60.0	38.0	33.0	14.0	-12.0	-57.0	-10.0
Darwin	38.0	500.0	60.0	54.0	60.0	55.0	28.0	21.0	-23.0	6.0
ASprin	64.0	60.0	500.0	66.0	55.0	37.0	24.0	-2.0	-39.0	-3.0
TownsV	59.0	54.0	66.0	500.0	37.0	55.0	34.0	9.0	-37.0	-16.0
Derby	38.0	60.0	55.0	37.0	500.0	34.0	16.0	12.0	-26.0	12.0
Jayapu	33.0	56.0	38.0	56.0	35.0	500.0	58.0	35.0	-8.0	-17.0
Guam	14.0	28.0	27.0	36.0	16.0	59.0	500.0	36.0	-11.0	-24.0
Manila	-11.0	21.0	0.0	5.0	13.0	34.0	36.0	500.0	27.0	-17.0
Songkh	-57.0	-21.0	-42.0	-40.0	-24.0	-2.0	-11.0	27.0	500.0	-11.0
Cocos	-10.0	6.0	-3.0	-16.0	12.0	-17.0	-22.0	-12.0	-9.0	500.0

Time-of-day (UT) = 6  
Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	45.0	65.0	61.0	46.0	41.0	28.0	11.0	-21.0	13.0
Darwin	44.0	500.0	59.0	61.0	65.0	59.0	43.0	39.0	6.0	26.0
ASprin	64.0	59.0	500.0	67.0	59.0	45.0	37.0	19.0	5.0	23.0
TownsV	60.0	60.0	67.0	500.0	44.0	59.0	45.0	32.0	1.0	9.0
Derby	45.0	65.0	60.0	45.0	500.0	44.0	34.0	33.0	5.0	33.0
Jayapu	41.0	61.0	46.0	62.0	45.0	500.0	64.0	44.0	19.0	13.0
Guam	27.0	42.0	39.0	47.0	32.0	64.0	500.0	45.0	18.0	8.0
Manila	11.0	39.0	22.0	30.0	34.0	43.0	46.0	500.0	41.0	11.0
Songkh	-20.0	5.0	-1.0	-2.0	-1.0	23.0	19.0	40.0	500.0	19.0
Cocos	12.0	27.0	24.0	11.0	34.0	12.0	11.0	13.0	22.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	52.0	67.0	64.0	51.0	47.0	41.0	28.0	4.0	29.0
Darwin	51.0	500.0	66.0	62.0	68.0	61.0	47.0	44.0	25.0	38.0
ASprin	66.0	65.0	500.0	69.0	63.0	52.0	45.0	33.0	21.0	33.0
TownsV	62.0	61.0	68.0	500.0	52.0	58.0	51.0	40.0	22.0	25.0
Derby	51.0	69.0	65.0	54.0	500.0	51.0	44.0	42.0	25.0	43.0
Jayapu	47.0	63.0	54.0	61.0	52.0	500.0	67.0	49.0	28.0	29.0
Guam	40.0	45.0	46.0	53.0	39.0	66.0	500.0	51.0	33.0	21.0
Manila	29.0	44.0	36.0	38.0	43.0	49.0	53.0	500.0	56.0	26.0
Songkh	5.0	23.0	17.0	22.0	17.0	34.0	34.0	55.0	500.0	30.0
Cocos	29.0	40.0	35.0	29.0	44.0	28.0	26.0	30.0	33.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	60.0	43.0	66.0	61.0	51.0	48.0	39.0	24.0	43.0
Darwin	60.0	500.0	69.0	66.0	51.0	66.0	53.0	49.0	35.0	47.0
ASprin	42.0	68.0	500.0	57.0	67.0	58.0	51.0	41.0	34.0	44.0
TownsV	65.0	65.0	56.0	500.0	59.0	63.0	53.0	45.0	33.0	39.0
Derby	61.0	51.0	68.0	60.0	500.0	58.0	51.0	49.0	35.0	50.0
Jayapu	51.0	67.0	60.0	65.0	60.0	500.0	65.0	56.0	39.0	41.0
Guam	47.0	50.0	52.0	55.0	47.0	64.0	500.0	56.0	38.0	27.0
Manila	42.0	51.0	46.0	43.0	51.0	57.0	59.0	500.0	61.0	33.0
Songkh	27.0	36.0	28.0	30.0	33.0	44.0	41.0	60.0	500.0	45.0
Cocos	43.0	49.0	45.0	42.0	51.0	42.0	33.0	36.0	46.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	63.0	4.0	50.0	64.0	35.0	51.0	45.0	33.0	48.0
Darwin	62.0	500.0	56.0	68.0	19.0	61.0	58.0	54.0	26.0	51.0
ASprin	4.0	56.0	500.0	40.0	57.0	63.0	54.0	46.0	40.0	49.0
TownsV	50.0	67.0	39.0	500.0	63.0	67.0	57.0	49.0	39.0	46.0

Derby	64.0	19.0	57.0	63.0	500.0	61.0	53.0	55.0	41.0	58.0
Jayapu	37.0	61.0	63.0	68.0	62.0	500.0	63.0	60.0	3.0	48.0
Guam	51.0	56.0	54.0	57.0	49.0	63.0	500.0	54.0	44.0	38.0
Manila	48.0	56.0	51.0	46.0	57.0	62.0	57.0	500.0	47.0	42.0
Songkh	35.0	27.0	31.0	34.0	37.0	5.0	46.0	46.0	500.0	50.0
Cocos	47.0	52.0	49.0	47.0	58.0	47.0	41.0	43.0	51.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	64.0	-37.0	21.0	64.0	-5.0	53.0	49.0	37.0	49.0
Darwin	62.0	500.0	42.0	56.0	-18.0	43.0	60.0	59.0	15.0	55.0
ASprin	-37.0	42.0	500.0	15.0	45.0	65.0	56.0	50.0	45.0	50.0
TownsV	21.0	56.0	15.0	500.0	63.0	55.0	10.0	32.0	22.0	48.0
Derby	64.0	-18.0	45.0	64.0	500.0	64.0	25.0	57.0	17.0	60.0
Jayapu	17.0	43.0	65.0	55.0	64.0	500.0	62.0	52.0	52.0	49.0
Guam	53.0	59.0	56.0	10.0	34.0	62.0	500.0	49.0	27.0	25.0
Manila	50.0	59.0	53.0	35.0	58.0	53.0	51.0	500.0	49.0	27.0
Songkh	39.0	15.0	38.0	25.0	25.0	55.0	24.0	48.0	500.0	56.0
Cocos	45.0	55.0	49.0	49.0	60.0	49.0	27.0	27.0	56.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	48.0	-36.0	-21.0	43.0	60.0	26.0	49.0	-2.0	15.0
Darwin	51.0	500.0	22.0	44.0	-17.0	22.0	54.0	53.0	51.0	26.0
ASprin	-36.0	22.0	500.0	-12.0	26.0	54.0	15.0	50.0	10.0	32.0
TownsV	-21.0	44.0	-12.0	500.0	53.0	33.0	62.0	-6.0	-19.0	46.0
Derby	43.0	-17.0	26.0	53.0	500.0	65.0	-24.0	60.0	-24.0	61.0
Jayapu	58.0	22.0	54.0	33.0	65.0	500.0	59.0	42.0	-999.0	53.0
Guam	26.0	53.0	15.0	62.0	18.0	59.0	500.0	40.0	46.0	39.0
Manila	51.0	53.0	54.0	22.0	60.0	43.0	40.0	500.0	49.0	53.0
Songkh	-3.0	49.0	22.0	13.0	13.0	-999.0	46.0	49.0	500.0	57.0
Cocos	21.0	28.0	30.0	46.0	61.0	53.0	40.0	56.0	58.0	500.0

Time-of-day (UT) = 6

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	26.0	-35.0	-65.0	15.0	47.0	-13.0	23.0	39.0	-33.0
Darwin	40.0	500.0	-2.0	27.0	-17.0	-3.0	47.0	39.0	43.0	-16.0
ASprin	-35.0	-2.0	500.0	-33.0	3.0	35.0	-38.0	28.0	37.0	13.0
TownsV	-65.0	27.0	-33.0	500.0	43.0	-1.0	57.0	54.0	-88.0	26.0
Derby	15.0	-17.0	3.0	43.0	500.0	50.0	57.0	60.0	52.0	60.0
Jayapu	49.0	-3.0	35.0	-1.0	50.0	500.0	54.0	28.0	-999.0	35.0
Guam	-18.0	47.0	-38.0	57.0	55.0	54.0	500.0	25.0	-19.0	-15.0
Manila	23.0	48.0	15.0	52.0	60.0	28.0	25.0	500.0	47.0	53.0
Songkh	40.0	42.0	40.0	-5.0	49.0	-999.0	-42.0	47.0	500.0	47.0
Cocos	-9.0	-10.0	6.0	26.0	60.0	35.0	-14.0	55.0	41.0	500.0



Time-of-day (UT) = 10  
Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	43.0	61.0	56.0	44.0	37.0	17.0	-1.0	-40.0	12.0
Darwin	40.0	500.0	59.0	56.0	62.0	53.0	27.0	14.0	-24.0	19.0
ASprin	60.0	59.0	500.0	59.0	58.0	39.0	26.0	2.0	-23.0	14.0
TownsV	55.0	56.0	59.0	500.0	41.0	52.0	29.0	2.0	-41.0	5.0
Derby	42.0	63.0	58.0	41.0	500.0	36.0	23.0	10.0	-29.0	24.0
Jayapu	38.0	56.0	42.0	55.0	40.0	500.0	47.0	19.0	-22.0	2.0
Guam	23.0	35.0	35.0	38.0	31.0	52.0	500.0	21.0	-23.0	-13.0
Manila	10.0	27.0	15.0	15.0	23.0	28.0	25.0	500.0	1.0	-4.0
Songkh	-35.0	-16.0	-15.0	-33.0	-21.0	-18.0	-24.0	-4.0	500.0	-24.0
Cocos	8.0	19.0	12.0	5.0	23.0	-2.0	-23.0	-17.0	-32.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	56.0	65.0	61.0	56.0	45.0	37.0	28.0	13.0	39.0
Darwin	53.0	500.0	64.0	58.0	67.0	60.0	40.0	37.0	22.0	40.0
ASprin	64.0	64.0	500.0	66.0	63.0	49.0	35.0	26.0	10.0	39.0
TownsV	60.0	58.0	66.0	500.0	52.0	58.0	41.0	27.0	5.0	30.0
Derby	54.0	67.0	63.0	53.0	500.0	48.0	35.0	33.0	15.0	47.0
Jayapu	44.0	63.0	52.0	61.0	51.0	500.0	54.0	39.0	21.0	36.0
Guam	31.0	47.0	43.0	50.0	44.0	58.0	500.0	41.0	18.0	15.0
Manila	23.0	45.0	35.0	38.0	43.0	43.0	42.0	500.0	42.0	33.0
Songkh	2.0	27.0	12.0	8.0	17.0	14.0	11.0	37.0	500.0	26.0
Cocos	33.0	39.0	36.0	25.0	46.0	31.0	7.0	22.0	22.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	60.0	66.0	64.0	60.0	50.0	44.0	39.0	29.0	47.0
Darwin	58.0	500.0	67.0	64.0	70.0	64.0	50.0	47.0	31.0	51.0
ASprin	64.0	67.0	500.0	68.0	66.0	56.0	46.0	41.0	32.0	49.0
TownsV	62.0	64.0	68.0	500.0	60.0	61.0	51.0	41.0	28.0	44.0
Derby	59.0	70.0	66.0	60.0	500.0	56.0	46.0	45.0	31.0	55.0
Jayapu	51.0	68.0	59.0	65.0	59.0	500.0	59.0	49.0	37.0	44.0
Guam	44.0	56.0	53.0	58.0	54.0	63.0	500.0	50.0	36.0	35.0
Manila	40.0	55.0	49.0	51.0	53.0	52.0	52.0	500.0	53.0	35.0
Songkh	26.0	34.0	35.0	32.0	34.0	33.0	32.0	50.0	500.0	39.0
Cocos	45.0	52.0	50.0	44.0	55.0	40.0	29.0	31.0	37.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 12

TX\RX Adelad Darwin ASprin TownsV Derby Jayapu Guam Manila Songkh Cocos

Adelad	500.0	62.0	48.0	58.0	62.0	51.0	48.0	45.0	36.0	49.0
Darwin	61.0	500.0	68.0	67.0	63.0	64.0	56.0	53.0	39.0	54.0
ASprin	47.0	68.0	500.0	57.0	67.0	59.0	52.0	47.0	41.0	52.0
TownsV	56.0	66.0	56.0	500.0	62.0	61.0	54.0	48.0	37.0	48.0
Derby	61.0	64.0	67.0	63.0	500.0	59.0	53.0	51.0	40.0	58.0
Jayapu	53.0	68.0	63.0	66.0	63.0	500.0	61.0	54.0	45.0	49.0
Guam	50.0	61.0	58.0	62.0	59.0	63.0	500.0	55.0	44.0	43.0
Manila	48.0	60.0	55.0	57.0	59.0	57.0	57.0	500.0	54.0	43.0
Songkh	38.0	40.0	47.0	43.0	45.0	43.0	43.0	52.0	500.0	46.0
Cocos	50.0	59.0	54.0	51.0	61.0	49.0	40.0	42.0	47.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	62.0	19.0	44.0	61.0	29.0	49.0	46.0	37.0	47.0
Darwin	61.0	500.0	56.0	67.0	42.0	67.0	59.0	56.0	44.0	54.0
ASprin	18.0	56.0	500.0	39.0	55.0	62.0	55.0	51.0	47.0	52.0
TownsV	42.0	66.0	38.0	500.0	64.0	64.0	56.0	51.0	42.0	50.0
Derby	61.0	42.0	55.0	64.0	500.0	61.0	56.0	53.0	46.0	59.0
Jayapu	33.0	70.0	65.0	68.0	63.0	500.0	64.0	56.0	48.0	54.0
Guam	51.0	63.0	60.0	61.0	60.0	65.0	500.0	57.0	48.0	48.0
Manila	51.0	62.0	59.0	59.0	61.0	60.0	60.0	500.0	58.0	49.0
Songkh	41.0	47.0	52.0	49.0	52.0	49.0	49.0	57.0	500.0	52.0
Cocos	50.0	59.0	56.0	54.0	63.0	55.0	47.0	47.0	52.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	49.0	-17.0	16.0	45.0	56.0	34.0	44.0	42.0	25.0
Darwin	49.0	500.0	40.0	53.0	7.0	61.0	61.0	59.0	48.0	56.0
ASprin	-17.0	40.0	500.0	11.0	39.0	63.0	57.0	53.0	50.0	46.0
TownsV	15.0	53.0	11.0	500.0	54.0	58.0	57.0	52.0	49.0	48.0
Derby	45.0	7.0	40.0	55.0	500.0	64.0	57.0	55.0	50.0	60.0
Jayapu	57.0	63.0	65.0	59.0	65.0	500.0	66.0	57.0	49.0	55.0
Guam	34.0	63.0	59.0	60.0	60.0	67.0	500.0	58.0	50.0	50.0
Manila	48.0	63.0	59.0	59.0	61.0	61.0	62.0	500.0	60.0	52.0
Songkh	46.0	51.0	55.0	55.0	55.0	51.0	53.0	60.0	500.0	57.0
Cocos	26.0	60.0	49.0	51.0	63.0	57.0	51.0	50.0	56.0	500.0

Time-of-day (UT) = 10

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	31.0	-32.0	-20.0	25.0	46.0	11.0	23.0	25.0	-3.0
Darwin	36.0	500.0	17.0	39.0	-16.0	48.0	62.0	60.0	51.0	33.0
ASprin	-32.0	17.0	500.0	-18.0	16.0	49.0	52.0	54.0	51.0	24.0
TownsV	-21.0	39.0	-18.0	500.0	44.0	42.0	36.0	54.0	51.0	27.0
Derby	25.0	-16.0	16.0	44.0	500.0	64.0	58.0	55.0	53.0	62.0
Jayapu	47.0	49.0	50.0	43.0	65.0	500.0	54.0	60.0	50.0	56.0

Guam	-3.0	63.0	53.0	37.0	59.0	54.0	500.0	61.0	51.0	51.0
Manila	22.0	63.0	58.0	58.0	59.0	63.0	64.0	500.0	64.0	55.0
Songkh	26.0	53.0	55.0	54.0	57.0	52.0	54.0	64.0	500.0	60.0
Cocos	-12.0	27.0	17.0	28.0	63.0	57.0	51.0	54.0	58.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	5.0	-32.0	-57.0	-4.0	31.0	-25.0	-2.0	4.0	-48.0
Darwin	15.0	500.0	-9.0	18.0	-15.0	24.0	62.0	62.0	37.0	-1.0
ASprin	-32.0	-9.0	500.0	-31.0	-10.0	28.0	22.0	39.0	49.0	0.0
TownsV	-57.0	18.0	-31.0	500.0	28.0	14.0	62.0	40.0	49.0	6.0
Derby	-4.0	-15.0	-10.0	28.0	500.0	52.0	38.0	32.0	54.0	55.0
Jayapu	35.0	25.0	28.0	14.0	52.0	500.0	36.0	60.0	39.0	55.0
Guam	-68.0	62.0	22.0	62.0	39.0	36.0	500.0	62.0	50.0	49.0
Manila	-22.0	62.0	41.0	42.0	34.0	62.0	64.0	500.0	66.0	41.0
Songkh	-10.0	39.0	51.0	51.0	58.0	40.0	52.0	66.0	500.0	62.0
Cocos	-71.0	-36.0	-23.0	7.0	55.0	58.0	49.0	40.0	61.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-27.0	-31.0	-66.0	-38.0	9.0	-77.0	-39.0	-29.0	-999.0
Darwin	-11.0	500.0	-34.0	-7.0	-15.0	-6.0	60.0	62.0	25.0	53.0
ASprin	-31.0	-34.0	500.0	-31.0	-36.0	-4.0	44.0	28.0	32.0	-35.0
TownsV	-66.0	-7.0	-31.0	500.0	6.0	-23.0	58.0	19.0	31.0	-24.0
Derby	-38.0	-15.0	-36.0	6.0	500.0	36.0	12.0	62.0	36.0	45.0
Jayapu	17.0	-6.0	-4.0	-23.0	36.0	500.0	9.0	51.0	17.0	31.0
Guam	-999.0	60.0	44.0	58.0	12.0	9.0	500.0	50.0	31.0	34.0
Manila	-90.0	61.0	17.0	19.0	63.0	52.0	51.0	500.0	55.0	27.0
Songkh	-70.0	25.0	30.0	32.0	35.0	18.0	33.0	55.0	500.0	62.0
Cocos	-999.0	53.0	-79.0	-24.0	45.0	25.0	34.0	27.0	63.0	500.0

Time-of-day (UT) = 10  
Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-61.0	-31.0	-65.0	-71.0	-19.0	-999.0	-89.0	-75.0	-999.0
Darwin	-41.0	500.0	-40.0	-33.0	-14.0	-37.0	48.0	52.0	44.0	41.0
ASprin	-31.0	-40.0	500.0	-30.0	-46.0	-42.0	-71.0	11.0	18.0	-79.0
TownsV	-65.0	-33.0	-30.0	500.0	-19.0	-59.0	44.0	-17.0	7.0	-64.0
Derby	-71.0	-14.0	-46.0	-19.0	500.0	11.0	55.0	60.0	16.0	30.0
Jayapu	-6.0	-37.0	-42.0	-59.0	11.0	500.0	-21.0	37.0	-18.0	4.0
Guam	-999.0	48.0	-71.0	44.0	55.0	-21.0	500.0	35.0	5.0	11.0
Manila	-999.0	53.0	-20.0	-17.0	60.0	38.0	35.0	500.0	44.0	59.0
Songkh	-999.0	43.0	2.0	7.0	0.0	-18.0	12.0	44.0	500.0	55.0
Cocos	-999.0	34.0	-999.0	-64.0	30.0	-23.0	11.0	60.0	54.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	46.0	60.0	55.0	48.0	34.0	20.0	13.0	11.0	34.0
Darwin	44.0	500.0	58.0	51.0	63.0	48.0	21.0	19.0	12.0	40.0
ASprin	58.0	58.0	500.0	60.0	58.0	38.0	19.0	13.0	8.0	40.0
TownsV	53.0	51.0	60.0	500.0	46.0	45.0	20.0	9.0	5.0	19.0
Derby	45.0	63.0	57.0	46.0	500.0	37.0	16.0	12.0	13.0	45.0
Jayapu	35.0	56.0	43.0	53.0	43.0	500.0	36.0	20.0	10.0	25.0
Guam	20.0	38.0	27.0	34.0	29.0	45.0	500.0	23.0	14.0	15.0
Manila	19.0	40.0	25.0	25.0	34.0	33.0	27.0	500.0	37.0	26.0
Songkh	10.0	23.0	17.0	16.0	23.0	14.0	9.0	28.0	500.0	31.0
Cocos	31.0	39.0	35.0	19.0	44.0	17.0	-2.0	5.0	20.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	56.0	63.0	60.0	57.0	45.0	35.0	32.0	30.0	47.0
Darwin	55.0	500.0	63.0	60.0	66.0	59.0	42.0	38.0	31.0	53.0
ASprin	62.0	63.0	500.0	64.0	62.0	51.0	38.0	35.0	35.0	51.0
TownsV	58.0	60.0	63.0	500.0	56.0	56.0	41.0	35.0	30.0	44.0
Derby	56.0	66.0	62.0	57.0	500.0	51.0	40.0	37.0	33.0	57.0
Jayapu	48.0	65.0	55.0	62.0	55.0	500.0	51.0	41.0	35.0	47.0
Guam	39.0	55.0	46.0	52.0	49.0	57.0	500.0	43.0	36.0	36.0
Manila	39.0	54.0	44.0	47.0	52.0	50.0	45.0	500.0	47.0	46.0
Songkh	28.0	38.0	32.0	31.0	37.0	39.0	31.0	41.0	500.0	43.0
Cocos	45.0	54.0	50.0	41.0	56.0	42.0	27.0	30.0	35.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	60.0	56.0	64.0	61.0	49.0	44.0	41.0	37.0	50.0
Darwin	59.0	500.0	65.0	65.0	58.0	61.0	51.0	49.0	43.0	54.0
ASprin	55.0	65.0	500.0	60.0	64.0	56.0	46.0	44.0	43.0	53.0
TownsV	62.0	64.0	59.0	500.0	61.0	58.0	48.0	45.0	42.0	50.0
Derby	60.0	58.0	65.0	62.0	500.0	56.0	48.0	46.0	43.0	59.0
Jayapu	52.0	67.0	60.0	64.0	60.0	500.0	56.0	50.0	46.0	53.0
Guam	48.0	61.0	53.0	59.0	57.0	60.0	500.0	50.0	46.0	48.0
Manila	48.0	62.0	53.0	55.0	59.0	57.0	52.0	500.0	55.0	53.0
Songkh	39.0	50.0	47.0	47.0	49.0	49.0	44.0	51.0	500.0	51.0
Cocos	50.0	56.0	54.0	51.0	60.0	51.0	42.0	42.0	46.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	62.0	30.0	51.0	56.0	28.0	48.0	45.0	45.0	33.0
Darwin	61.0	500.0	52.0	59.0	32.0	59.0	57.0	55.0	48.0	41.0

ASprin	29.0	52.0	500.0	45.0	51.0	59.0	50.0	48.0	47.0	39.0
TownsV	51.0	58.0	45.0	500.0	62.0	61.0	51.0	48.0	46.0	51.0
Derby	56.0	32.0	51.0	63.0	500.0	59.0	52.0	49.0	49.0	60.0
Jayapu	34.0	63.0	62.0	66.0	62.0	500.0	61.0	55.0	51.0	53.0
Guam	47.0	64.0	55.0	58.0	58.0	63.0	500.0	54.0	48.0	53.0
Manila	47.0	64.0	54.0	56.0	59.0	60.0	57.0	500.0	60.0	56.0
Songkh	45.0	54.0	50.0	51.0	54.0	54.0	48.0	58.0	500.0	55.0
Cocos	35.0	42.0	40.0	52.0	62.0	52.0	50.0	49.0	51.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	46.0	-10.0	26.0	40.0	54.0	27.0	26.0	28.0	-4.0
Darwin	48.0	500.0	30.0	46.0	-4.0	48.0	60.0	57.0	51.0	56.0
ASprin	-10.0	30.0	500.0	18.0	29.0	51.0	39.0	46.0	45.0	15.0
TownsV	26.0	46.0	18.0	500.0	50.0	50.0	37.0	48.0	45.0	29.0
Derby	44.0	-4.0	29.0	50.0	500.0	59.0	53.0	49.0	50.0	53.0
Jayapu	56.0	50.0	53.0	52.0	61.0	500.0	54.0	58.0	52.0	47.0
Guam	28.0	63.0	42.0	37.0	55.0	55.0	500.0	58.0	47.0	53.0
Manila	30.0	63.0	50.0	53.0	56.0	62.0	60.0	500.0	63.0	56.0
Songkh	30.0	55.0	46.0	49.0	56.0	55.0	49.0	62.0	500.0	62.0
Cocos	4.0	58.0	13.0	24.0	54.0	47.0	53.0	51.0	59.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	22.0	-28.0	-13.0	11.0	39.0	-8.0	-5.0	-1.0	-70.0
Darwin	31.0	500.0	0.0	25.0	-12.0	25.0	60.0	60.0	48.0	46.0
ASprin	-28.0	0.0	500.0	-14.0	-2.0	35.0	15.0	24.0	23.0	-28.0
TownsV	-13.0	25.0	-14.0	500.0	35.0	28.0	57.0	28.0	31.0	2.0
Derby	23.0	-12.0	-2.0	35.0	500.0	43.0	32.0	58.0	36.0	41.0
Jayapu	43.0	25.0	35.0	29.0	44.0	500.0	33.0	59.0	48.0	17.0
Guam	-10.0	62.0	17.0	59.0	33.0	34.0	500.0	43.0	12.0	49.0
Manila	-5.0	63.0	22.0	32.0	61.0	62.0	45.0	500.0	56.0	50.0
Songkh	-2.0	50.0	22.0	33.0	38.0	50.0	13.0	55.0	500.0	62.0
Cocos	-49.0	43.0	-35.0	-40.0	41.0	4.0	50.0	47.0	61.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-13.0	-28.0	-52.0	-28.0	17.0	-65.0	-58.0	-53.0	-999.0
Darwin	5.0	500.0	-30.0	-3.0	-11.0	-7.0	53.0	58.0	26.0	27.0
ASprin	-28.0	-30.0	500.0	-27.0	-33.0	6.0	-28.0	-2.0	-2.0	-87.0
TownsV	-52.0	-3.0	-27.0	500.0	11.0	-4.0	49.0	-1.0	5.0	-41.0
Derby	-7.0	-11.0	-33.0	11.0	500.0	21.0	54.0	56.0	15.0	21.0
Jayapu	26.0	-7.0	6.0	-4.0	21.0	500.0	-3.0	47.0	16.0	-27.0
Guam	-71.0	53.0	-27.0	47.0	55.0	-3.0	500.0	15.0	-48.0	22.0
Manila	-63.0	60.0	-18.0	0.0	58.0	48.0	16.0	500.0	45.0	14.0

Songkh	-57.0	21.0	-15.0	6.0	3.0	17.0	-48.0	45.0	500.0	62.0
Cocos	-999.0	12.0	-999.0	-999.0	21.0	-68.0	22.0	12.0	63.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-53.0	-27.0	-60.0	-69.0	-16.0	-999.0	-999.0	-999.0	-999.0
Darwin	-27.0	500.0	-35.0	-34.0	-11.0	-39.0	42.0	43.0	-1.0	-2.0
ASprin	-27.0	-35.0	500.0	-27.0	-40.0	-30.0	-87.0	-40.0	-39.0	-999.0
TownsV	-60.0	-34.0	-27.0	500.0	-19.0	-40.0	35.0	-48.0	-37.0	-98.0
Derby	-40.0	-11.0	-40.0	-19.0	500.0	-10.0	-46.0	46.0	-20.0	-7.0
Jayapu	2.0	-39.0	-30.0	-40.0	-10.0	500.0	-42.0	26.0	-32.0	-89.0
Guam	-999.0	36.0	-87.0	26.0	-45.0	-42.0	500.0	-24.0	-999.0	-22.0
Manila	-999.0	44.0	-74.0	-48.0	43.0	27.0	-24.0	500.0	36.0	55.0
Songkh	-999.0	-24.0	-71.0	-37.0	-55.0	-32.0	-999.0	35.0	500.0	59.0
Cocos	-999.0	-34.0	-999.0	-999.0	-7.0	-999.0	-23.0	54.0	60.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-90.0	-27.0	-60.0	-84.0	-54.0	-999.0	-999.0	-999.0	-999.0
Darwin	-59.0	500.0	-35.0	-62.0	-11.0	-44.0	26.0	21.0	-41.0	-38.0
ASprin	-27.0	-35.0	500.0	-27.0	-40.0	-67.0	-999.0	-87.0	-88.0	-999.0
TownsV	-60.0	-62.0	-27.0	500.0	-51.0	-67.0	15.0	-999.0	-95.0	-999.0
Derby	-73.0	-11.0	-40.0	-51.0	500.0	-45.0	-999.0	33.0	-68.0	-40.0
Jayapu	-27.0	-44.0	-67.0	-67.0	-45.0	500.0	-53.0	-5.0	-999.0	-999.0
Guam	-999.0	9.0	-999.0	-7.0	-999.0	-53.0	500.0	-64.0	-999.0	-90.0
Manila	-999.0	21.0	-999.0	-999.0	21.0	-5.0	-64.0	500.0	20.0	41.0
Songkh	-999.0	-89.0	-999.0	-95.0	-999.0	-999.0	-999.0	20.0	500.0	48.0
Cocos	-999.0	-85.0	-999.0	-999.0	-40.0	-999.0	-91.0	40.0	48.0	500.0

Time-of-day (UT) = 14

Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-90.0	-27.0	-60.0	-83.0	-91.0	-999.0	-999.0	-999.0	-999.0
Darwin	-90.0	500.0	-35.0	-61.0	-10.0	-43.0	3.0	-10.0	-91.0	-76.0
ASprin	-27.0	-35.0	500.0	-26.0	-39.0	-85.0	-999.0	-999.0	-999.0	-999.0
TownsV	-60.0	-61.0	-26.0	500.0	-80.0	-66.0	-11.0	-999.0	-999.0	-999.0
Derby	-83.0	-10.0	-39.0	-80.0	500.0	-79.0	-999.0	14.0	-999.0	-73.0
Jayapu	-58.0	-43.0	-85.0	-66.0	-79.0	500.0	-53.0	-43.0	-999.0	-999.0
Guam	-999.0	-28.0	-999.0	-48.0	-999.0	-53.0	500.0	-71.0	-999.0	-999.0
Manila	-999.0	-10.0	-999.0	-999.0	-11.0	-43.0	-71.0	500.0	-8.0	20.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-8.0	500.0	32.0
Cocos	-999.0	-999.0	-999.0	-999.0	-73.0	-999.0	-999.0	20.0	32.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	46.0	59.0	54.0	48.0	34.0	14.0	-3.0	10.0	32.0
Darwin	45.0	500.0	58.0	52.0	63.0	53.0	29.0	19.0	13.0	43.0
ASprin	58.0	58.0	500.0	60.0	58.0	40.0	28.0	17.0	14.0	38.0
TownsV	52.0	51.0	59.0	500.0	45.0	47.0	28.0	14.0	6.0	28.0
Derby	46.0	63.0	58.0	46.0	500.0	42.0	28.0	20.0	16.0	47.0
Jayapu	37.0	59.0	46.0	54.0	47.0	500.0	45.0	23.0	12.0	29.0
Guam	22.0	39.0	27.0	34.0	31.0	49.0	500.0	22.0	12.0	20.0
Manila	18.0	42.0	28.0	26.0	40.0	37.0	33.0	500.0	38.0	29.0
Songkh	10.0	25.0	20.0	17.0	26.0	17.0	14.0	30.0	500.0	38.0
Cocos	30.0	43.0	38.0	26.0	47.0	28.0	11.0	8.0	25.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	56.0	64.0	60.0	58.0	45.0	33.0	27.0	29.0	47.0
Darwin	55.0	500.0	63.0	60.0	67.0	59.0	44.0	38.0	33.0	53.0
ASprin	63.0	64.0	500.0	64.0	63.0	52.0	41.0	34.0	34.0	51.0
TownsV	59.0	60.0	64.0	500.0	57.0	54.0	40.0	34.0	33.0	45.0
Derby	56.0	66.0	63.0	57.0	500.0	52.0	43.0	38.0	35.0	57.0
Jayapu	47.0	64.0	57.0	59.0	57.0	500.0	53.0	42.0	36.0	48.0
Guam	41.0	53.0	45.0	47.0	50.0	57.0	500.0	41.0	35.0	39.0
Manila	40.0	56.0	45.0	46.0	54.0	51.0	47.0	500.0	48.0	48.0
Songkh	35.0	41.0	34.0	32.0	39.0	34.0	34.0	42.0	500.0	47.0
Cocos	46.0	53.0	51.0	45.0	58.0	45.0	35.0	33.0	37.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	61.0	67.0	64.0	62.0	50.0	37.0	37.0	38.0	53.0
Darwin	60.0	500.0	66.0	64.0	60.0	58.0	51.0	48.0	43.0	53.0
ASprin	66.0	66.0	500.0	62.0	66.0	57.0	41.0	39.0	41.0	54.0
TownsV	64.0	64.0	62.0	500.0	61.0	59.0	28.0	39.0	40.0	50.0
Derby	61.0	60.0	66.0	61.0	500.0	57.0	46.0	42.0	43.0	59.0
Jayapu	51.0	62.0	61.0	62.0	61.0	500.0	57.0	49.0	46.0	50.0
Guam	45.0	59.0	46.0	35.0	52.0	61.0	500.0	49.0	46.0	48.0
Manila	49.0	61.0	49.0	49.0	56.0	58.0	54.0	500.0	56.0	54.0
Songkh	43.0	51.0	46.0	45.0	49.0	45.0	45.0	52.0	500.0	55.0
Cocos	52.0	53.0	54.0	50.0	60.0	48.0	42.0	42.0	46.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	62.0	49.0	57.0	63.0	30.0	18.0	39.0	39.0	48.0
Darwin	62.0	500.0	55.0	56.0	42.0	49.0	54.0	53.0	46.0	57.0
ASprin	49.0	55.0	500.0	50.0	58.0	54.0	15.0	27.0	39.0	39.0
TownsV	56.0	56.0	50.0	500.0	62.0	46.0	44.0	26.0	38.0	46.0

Derby	62.0	42.0	58.0	62.0	500.0	54.0	32.0	31.0	40.0	60.0
Jayapu	34.0	51.0	55.0	48.0	55.0	500.0	50.0	55.0	49.0	35.0
Guam	22.0	59.0	18.0	48.0	36.0	53.0	500.0	55.0	50.0	45.0
Manila	48.0	61.0	34.0	32.0	38.0	60.0	59.0	500.0	63.0	53.0
Songkh	40.0	51.0	41.0	40.0	43.0	49.0	49.0	60.0	500.0	62.0
Cocos	48.0	57.0	40.0	47.0	59.0	32.0	42.0	45.0	57.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	55.0	21.0	40.0	54.0	52.0	-17.0	24.0	42.0	18.0
Darwin	55.0	500.0	37.0	41.0	14.0	33.0	48.0	55.0	29.0	48.0
ASprin	21.0	37.0	500.0	27.0	43.0	43.0	-30.0	1.0	18.0	43.0
TownsV	40.0	41.0	27.0	500.0	52.0	24.0	31.0	-1.0	17.0	23.0
Derby	55.0	14.0	43.0	52.0	500.0	43.0	6.0	53.0	44.0	46.0
Jayapu	52.0	34.0	43.0	24.0	44.0	500.0	36.0	56.0	34.0	7.0
Guam	-18.0	50.0	-29.0	32.0	7.0	37.0	500.0	52.0	38.0	22.0
Manila	26.0	59.0	5.0	1.0	56.0	58.0	54.0	500.0	59.0	11.0
Songkh	42.0	18.0	18.0	17.0	44.0	29.0	37.0	58.0	500.0	62.0
Cocos	18.0	46.0	43.0	15.0	43.0	-15.0	16.0	19.0	60.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	45.0	-13.0	10.0	39.0	39.0	-76.0	-1.0	19.0	-21.0
Darwin	45.0	500.0	10.0	17.0	-12.0	1.0	37.0	46.0	4.0	34.0
ASprin	-13.0	10.0	500.0	-1.0	20.0	22.0	-97.0	-46.0	-15.0	-34.0
TownsV	10.0	17.0	-1.0	500.0	39.0	-14.0	6.0	-50.0	-15.0	-10.0
Derby	44.0	-12.0	20.0	39.0	500.0	23.0	-40.0	43.0	-17.0	26.0
Jayapu	42.0	1.0	23.0	-14.0	23.0	500.0	10.0	46.0	13.0	-39.0
Guam	-81.0	37.0	-96.0	6.0	-40.0	11.0	500.0	44.0	21.0	-8.0
Manila	-2.0	47.0	-42.0	-49.0	43.0	46.0	44.0	500.0	50.0	47.0
Songkh	23.0	-40.0	-14.0	-16.0	-57.0	-26.0	18.0	50.0	500.0	59.0
Cocos	-21.0	22.0	-34.0	-39.0	14.0	-96.0	-34.0	48.0	58.0	500.0

Time-of-day (UT) = 18

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	29.0	-30.0	-25.0	15.0	17.0	-999.0	-40.0	-15.0	-77.0
Darwin	29.0	500.0	-18.0	-12.0	-12.0	-43.0	19.0	33.0	-34.0	14.0
ASprin	-30.0	-18.0	500.0	-29.0	-7.0	-6.0	-999.0	-999.0	-66.0	-96.0
TownsV	-25.0	-12.0	-29.0	500.0	20.0	-50.0	-29.0	-999.0	-65.0	-57.0
Derby	27.0	-12.0	-7.0	20.0	500.0	-5.0	-999.0	29.0	-67.0	-2.0
Jayapu	26.0	-43.0	-6.0	-50.0	-5.0	500.0	-21.0	32.0	-20.0	-999.0
Guam	-999.0	17.0	-999.0	-29.0	-999.0	-20.0	500.0	28.0	-8.0	-54.0
Manila	-44.0	33.0	-999.0	-999.0	28.0	32.0	28.0	500.0	43.0	22.0
Songkh	-1.0	-999.0	-62.0	-65.0	-999.0	-999.0	-15.0	43.0	500.0	42.0
Cocos	-77.0	-15.0	-96.0	-999.0	-26.0	-999.0	-999.0	32.0	46.0	500.0



Time-of-day (UT) = 18  
Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	8.0	-30.0	-60.0	-16.0	-15.0	-999.0	-93.0	-66.0	-999.0
Darwin	8.0	500.0	-36.0	-43.0	-11.0	-42.0	-7.0	14.0	-83.0	-14.0
ASprin	-30.0	-36.0	500.0	-28.0	-33.0	-37.0	-999.0	-999.0	-999.0	-999.0
TownsV	-60.0	-43.0	-28.0	500.0	-5.0	-68.0	-68.0	-999.0	-999.0	-999.0
Derby	5.0	-11.0	-33.0	-5.0	500.0	-37.0	-999.0	8.0	-999.0	-36.0
Jayapu	4.0	-42.0	-37.0	-68.0	-37.0	500.0	-51.0	12.0	-66.0	-999.0
Guam	-999.0	-10.0	-999.0	-68.0	-999.0	-51.0	500.0	6.0	-48.0	-999.0
Manila	-99.0	14.0	-999.0	-999.0	6.0	12.0	6.0	500.0	29.0	-20.0
Songkh	-35.0	-999.0	-999.0	-999.0	-999.0	-999.0	-61.0	29.0	500.0	15.0
Cocos	-999.0	-59.0	-999.0	-999.0	-70.0	-999.0	-999.0	7.0	30.0	500.0

Time-of-day (UT) = 18  
Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-18.0	-29.0	-63.0	-49.0	-51.0	-999.0	-999.0	-999.0	-999.0
Darwin	-18.0	500.0	-36.0	-63.0	-11.0	-42.0	-36.0	-10.0	-999.0	-45.0
ASprin	-29.0	-36.0	500.0	-28.0	-41.0	-69.0	-999.0	-999.0	-999.0	-999.0
TownsV	-63.0	-63.0	-28.0	500.0	-34.0	-67.0	-999.0	-999.0	-999.0	-999.0
Derby	-22.0	-11.0	-41.0	-34.0	500.0	-69.0	-999.0	-18.0	-999.0	-71.0
Jayapu	-23.0	-42.0	-69.0	-67.0	-69.0	500.0	-60.0	-12.0	-999.0	-999.0
Guam	-999.0	-40.0	-999.0	-999.0	-999.0	-60.0	500.0	-20.0	-96.0	-999.0
Manila	-999.0	-10.0	-999.0	-999.0	-21.0	-12.0	-20.0	500.0	2.0	-69.0
Songkh	-79.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	2.0	500.0	-24.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-26.0	6.0	500.0

Time-of-day (UT) = 18  
Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-45.0	-29.0	-62.0	-81.0	-87.0	-999.0	-999.0	-999.0	-999.0
Darwin	-45.0	500.0	-35.0	-62.0	-10.0	-42.0	-67.0	-37.0	-999.0	-77.0
ASprin	-29.0	-35.0	500.0	-28.0	-40.0	-86.0	-999.0	-999.0	-999.0	-999.0
TownsV	-62.0	-62.0	-28.0	500.0	-62.0	-67.0	-999.0	-999.0	-999.0	-999.0
Derby	-49.0	-10.0	-40.0	-62.0	500.0	-88.0	-999.0	-47.0	-999.0	-999.0
Jayapu	-52.0	-42.0	-86.0	-67.0	-88.0	500.0	-60.0	-40.0	-999.0	-999.0
Guam	-999.0	-71.0	-999.0	-999.0	-999.0	-60.0	500.0	-47.0	-999.0	-999.0
Manila	-999.0	-37.0	-999.0	-999.0	-51.0	-40.0	-47.0	500.0	-49.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-49.0	500.0	-67.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-63.0	-24.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 3

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
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Adelad	500.0	25.0	53.0	41.0	32.0	5.0	-47.0	-31.0	-28.0	20.0
Darwin	26.0	500.0	48.0	37.0	57.0	38.0	-16.0	-1.0	-9.0	30.0
ASprin	53.0	47.0	500.0	47.0	48.0	11.0	-47.0	-29.0	-15.0	25.0
TownsV	40.0	35.0	46.0	500.0	19.0	25.0	-35.0	-49.0	-53.0	-1.0
Derby	34.0	58.0	50.0	22.0	500.0	17.0	-27.0	4.0	7.0	41.0
Jayapu	6.0	37.0	12.0	27.0	16.0	500.0	20.0	-12.0	-28.0	2.0
Guam	-47.0	-18.0	-47.0	-35.0	-33.0	19.0	500.0	-21.0	-43.0	-26.0
Manila	-19.0	10.0	-16.0	-36.0	14.0	-1.0	-9.0	500.0	25.0	23.0
Songkh	-16.0	3.0	-2.0	-39.0	20.0	-17.0	-31.0	25.0	500.0	34.0
Cocos	24.0	33.0	29.0	5.0	43.0	9.0	-19.0	16.0	27.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 6

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	46.0	64.0	57.0	50.0	36.0	10.0	16.0	15.0	40.0
Darwin	47.0	500.0	62.0	56.0	64.0	59.0	33.0	35.0	25.0	43.0
ASprin	64.0	61.0	500.0	63.0	60.0	42.0	24.0	22.0	17.0	43.0
TownsV	56.0	53.0	62.0	500.0	42.0	51.0	21.0	15.0	8.0	31.0
Derby	53.0	65.0	63.0	46.0	500.0	46.0	29.0	36.0	35.0	52.0
Jayapu	36.0	59.0	42.0	53.0	43.0	500.0	51.0	30.0	15.0	35.0
Guam	10.0	30.0	25.0	23.0	27.0	52.0	500.0	30.0	11.0	17.0
Manila	24.0	42.0	29.0	23.0	42.0	39.0	38.0	500.0	52.0	37.0
Songkh	24.0	34.0	26.0	19.0	45.0	25.0	20.0	53.0	500.0	47.0
Cocos	42.0	45.0	46.0	36.0	53.0	36.0	23.0	33.0	42.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 9

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	58.0	66.0	62.0	59.0	46.0	35.0	34.0	34.0	42.0
Darwin	58.0	500.0	65.0	61.0	60.0	63.0	48.0	48.0	39.0	35.0
ASprin	66.0	64.0	500.0	65.0	64.0	54.0	39.0	40.0	36.0	45.0
TownsV	61.0	60.0	65.0	500.0	56.0	60.0	42.0	36.0	30.0	44.0
Derby	60.0	60.0	65.0	58.0	500.0	56.0	44.0	44.0	39.0	55.0
Jayapu	46.0	64.0	55.0	61.0	55.0	500.0	62.0	44.0	35.0	44.0
Guam	31.0	47.0	39.0	42.0	43.0	62.0	500.0	45.0	32.0	32.0
Manila	34.0	52.0	42.0	40.0	48.0	50.0	50.0	500.0	56.0	30.0
Songkh	36.0	43.0	38.0	33.0	40.0	41.0	38.0	56.0	500.0	55.0
Cocos	42.0	35.0	46.0	43.0	55.0	40.0	33.0	25.0	49.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 12

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	61.0	52.0	64.0	63.0	52.0	46.0	46.0	17.0	14.0
Darwin	61.0	500.0	68.0	63.0	22.0	65.0	57.0	54.0	22.0	48.0
ASprin	52.0	68.0	500.0	68.0	57.0	60.0	50.0	47.0	26.0	17.0
TownsV	64.0	63.0	68.0	500.0	61.0	62.0	52.0	47.0	42.0	13.0
Derby	62.0	22.0	57.0	61.0	500.0	59.0	52.0	18.0	10.0	44.0
Jayapu	53.0	66.0	61.0	63.0	59.0	500.0	63.0	54.0	44.0	-19.0

Guam	45.0	55.0	50.0	52.0	52.0	63.0	500.0	56.0	42.0	-58.0
Manila	43.0	56.0	47.0	47.0	21.0	57.0	58.0	500.0	63.0	45.0
Songkh	23.0	31.0	30.0	42.0	17.0	46.0	46.0	63.0	500.0	45.0
Cocos	13.0	48.0	17.0	25.0	44.0	16.0	12.0	42.0	43.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 15

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	64.0	3.0	66.0	54.0	55.0	51.0	49.0	-71.0	-35.0
Darwin	64.0	500.0	45.0	66.0	-18.0	60.0	61.0	59.0	-1.0	34.0
ASprin	3.0	45.0	500.0	55.0	28.0	63.0	54.0	33.0	-44.0	-32.0
TownsV	66.0	66.0	55.0	500.0	64.0	64.0	56.0	51.0	25.0	-90.0
Derby	54.0	-18.0	28.0	64.0	500.0	63.0	55.0	53.0	-10.0	21.0
Jayapu	56.0	61.0	63.0	64.0	63.0	500.0	68.0	58.0	33.0	-999.0
Guam	52.0	59.0	55.0	56.0	55.0	68.0	500.0	59.0	45.0	-999.0
Manila	45.0	59.0	32.0	50.0	55.0	60.0	60.0	500.0	56.0	28.0
Songkh	-5.0	6.0	6.0	29.0	-6.0	36.0	46.0	56.0	500.0	25.0
Cocos	-35.0	34.0	-32.0	-8.0	22.0	-27.0	-30.0	28.0	26.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 18

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	52.0	-39.0	48.0	19.0	30.0	54.0	7.0	-999.0	-999.0
Darwin	53.0	500.0	6.0	58.0	-17.0	41.0	61.0	48.0	-40.0	10.0
ASprin	-39.0	6.0	500.0	27.0	-21.0	65.0	56.0	-20.0	-999.0	-999.0
TownsV	48.0	58.0	27.0	500.0	64.0	67.0	57.0	33.0	-35.0	-999.0
Derby	30.0	-17.0	-21.0	64.0	500.0	64.0	29.0	25.0	-64.0	-16.0
Jayapu	33.0	41.0	65.0	67.0	64.0	500.0	71.0	61.0	34.0	-999.0
Guam	54.0	60.0	56.0	58.0	30.0	71.0	500.0	62.0	-18.0	-999.0
Manila	-12.0	47.0	-69.0	31.0	26.0	62.0	63.0	500.0	51.0	-1.0
Songkh	-55.0	-36.0	-36.0	9.0	-60.0	41.0	23.0	51.0	500.0	-8.0
Cocos	-999.0	10.0	-999.0	-62.0	-13.0	-94.0	-98.0	1.0	-5.0	500.0

Time-of-day (UT) = 22

Frequency (MHz) = 21

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	21.0	-38.0	9.0	-44.0	-31.0	54.0	-67.0	-999.0	-999.0
Darwin	31.0	500.0	-38.0	41.0	-16.0	3.0	63.0	23.0	-999.0	-24.0
ASprin	-38.0	-38.0	500.0	-13.0	-49.0	56.0	32.0	-999.0	-999.0	-999.0
TownsV	9.0	41.0	-13.0	500.0	43.0	67.0	32.0	-10.0	-999.0	-999.0
Derby	-15.0	-16.0	-49.0	43.0	500.0	37.0	-21.0	-25.0	-999.0	-57.0
Jayapu	-9.0	3.0	56.0	67.0	37.0	500.0	55.0	52.0	-999.0	-999.0
Guam	55.0	60.0	32.0	33.0	-21.0	55.0	500.0	45.0	-999.0	-999.0
Manila	-999.0	-1.0	-999.0	-52.0	-24.0	53.0	45.0	500.0	44.0	-40.0
Songkh	-999.0	-999.0	-97.0	-24.0	-999.0	-8.0	-5.0	44.0	500.0	-48.0
Cocos	-999.0	-24.0	-999.0	-999.0	-53.0	-999.0	-999.0	-36.0	-44.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 24

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-33.0	-38.0	-44.0	-96.0	51.0	21.0	-999.0	-999.0	-999.0
Darwin	-6.0	500.0	-45.0	11.0	-15.0	-39.0	50.0	-20.0	-999.0	-62.0
ASprin	-38.0	-45.0	500.0	-40.0	-48.0	39.0	-7.0	-999.0	-999.0	-999.0
TownsV	-44.0	11.0	-40.0	500.0	14.0	44.0	-6.0	-86.0	-999.0	-999.0
Derby	-67.0	-15.0	-48.0	14.0	500.0	1.0	-999.0	-86.0	-999.0	-98.0
Jayapu	51.0	-39.0	39.0	44.0	1.0	500.0	46.0	19.0	-999.0	-999.0
Guam	24.0	48.0	-7.0	-6.0	-999.0	46.0	500.0	0.0	-999.0	-999.0
Manila	-999.0	-78.0	-999.0	-999.0	-86.0	20.0	1.0	500.0	30.0	-81.0
Songkh	-999.0	-999.0	-999.0	-71.0	-999.0	-48.0	-46.0	30.0	500.0	-90.0
Cocos	-999.0	-62.0	-999.0	-999.0	-93.0	-999.0	-999.0	-76.0	-85.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 27

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-92.0	-37.0	-78.0	-96.0	30.0	-33.0	-999.0	-999.0	-999.0
Darwin	-53.0	500.0	-45.0	-28.0	-15.0	-54.0	32.0	-73.0	-999.0	-999.0
ASprin	-37.0	-45.0	500.0	-39.0	-48.0	9.0	-71.0	-999.0	-999.0	-999.0
TownsV	-78.0	-28.0	-39.0	500.0	-26.0	18.0	58.0	-999.0	-999.0	-999.0
Derby	-96.0	-15.0	-48.0	-26.0	500.0	-45.0	-999.0	-999.0	-999.0	-999.0
Jayapu	36.0	-54.0	9.0	18.0	-45.0	500.0	26.0	-39.0	-999.0	-999.0
Guam	-17.0	15.0	-71.0	58.0	-999.0	26.0	500.0	-61.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-38.0	-61.0	500.0	3.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-97.0	-97.0	3.0	500.0	-999.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0

Time-of-day (UT) = 22  
Frequency (MHz) = 30

TX\RX	Adelad	Darwin	ASprin	TownsV	Derby	Jayapu	Guam	Manila	Songkh	Cocos
Adelad	500.0	-999.0	-37.0	-78.0	-95.0	-8.0	-999.0	-999.0	-999.0	-999.0
Darwin	-99.0	500.0	-44.0	-66.0	-15.0	-53.0	4.0	-999.0	-999.0	-999.0
ASprin	-37.0	-44.0	500.0	-39.0	-48.0	-30.0	-999.0	-999.0	-999.0	-999.0
TownsV	-78.0	-66.0	-39.0	500.0	-70.0	-16.0	43.0	-999.0	-999.0	-999.0
Derby	-95.0	-15.0	-48.0	-70.0	500.0	-91.0	-999.0	-999.0	-999.0	-999.0
Jayapu	11.0	-53.0	-30.0	-16.0	-91.0	500.0	-22.0	-999.0	-999.0	-999.0
Guam	-80.0	-40.0	-999.0	43.0	-999.0	-22.0	500.0	-92.0	-999.0	-999.0
Manila	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-91.0	500.0	-51.0	-999.0
Songkh	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-51.0	500.0	-999.0
Cocos	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	-999.0	500.0

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 6  
 Sunspot Number = 50.00  
 Required SNR (dB-Hz) for comm = 20.0

Time-of-day (UT) = 2  
 For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad		23	234	123459	1234589	123456789	13456789	1346789	14567	14578
1 Darwin		24	23459	02345679	023456789	023456789	02356789	02356789	03679	0678
2 ASprin		0134	0134	013459	013456789	013456789	13456789	1456789	5789	568
3 Townsv		02	0125	012456	012456789	012456789	012456789	0145789	145679	469
4 Derby		12	0129	01235679	012356789	012356789	02356789	02356789	035789	035679
5 Jayapu			136	01234678	012346789	012346789	012346789	12346789	0234679	024679
6 Guam			57	13578	12345789	01234579	0123459	0124589	01358	123458
7 Manila			568	145689	12345689	012345689	01234589	01234589	0123458	14589
8 Songkh		7	79	5679	1245679	01234579	0123479	012345679	2679	012679
9 Cocos			148	012478	012345678	012345678	012345678	012345678	1234568	34578

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	8	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 6  
 For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	23	23	12345	123456	12345679	123456789	13456789	1346789	14567	1578
1 Darwin		2345	0234567	02345679	023456789	023456789	02356789	0235679	02356789	03678
2 ASprin	03	0134	013456	0134569	013456789	013456789	13456789	1456789	14579	578
3 Townsv	02	0125	012456	0124567	012456789	012456789	012456789	0145789	14569	14679
4 Derby		12	01235	01235679	012356789	012356789	02356789	0235679	023579	356789
5 Jayapu		136	0123467	0123467	012346789	012346789	01234679	12346789	01234679	024679
6 Guam		5	12357	0123457	012345789	012345789	012345789	01245789	0135789	13457
7 Manila			1568	1234568	012345689	012345689	012345689	012345689	012345689	01345689
8 Songkh			7	57	135679	012345679	01234679	02345679	12679	012479
9 Cocos				1248	012345678	012345678	012345678	012345678	012345678	34578

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	12345	12345679	123456789	123456789	13456789	1456789	14578	5		
1 Darwin	023456	023456789	023456789	023456789	023456789	02356789	0356789	5678	6789	6789
2 ASprin	013456	01345679	013456789	013456789	13456789	1456789	56789	5678	678	
3 Townsv	012456	01245679	012456789	012456789	012456789	1456789	1456789	4678	68	6
4 Derby	0123569	01235679	012356789	012356789	012356789	02356789	0356789	356789	5789	679
5 Jayapu	012346	012346789	012346789	012346789	012346789	012346789	012346789	01246789	479	7
6 Guam	0123457		012345789	012345789	012345789	012345789	12345789	12345789	123789	1347
7 Manila	1456	012345689	012345689	012345689	012345689	012345689	012345689	12345689	145689	145689
8 Songkh		179	012345679	012345679	012345679	012345679	012345679	12345679	1234679	179

Step 3 Results for: Month = June, Sunspot # = 50, Required SNR = 20 dB-Hz,

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9 Cocos 4 01234578 012345678 012345678 012345678 012345678 1345678 45678 145678 1478

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	1234569	123456789	123456789	123456789	1345678	15				
1 Darwin	0234569	023456789	023456789	023456789	02356789	0356789	6789	67	67	
2 ASprin	013459	013456789	013456789	013456789	145678	578				
3 Townsv	012456	012456789	012456789	012456789	01456789	145678	6	6	7	
4 Derby	012359	012356789	012356789	012356789	02356789	0356789	5679	7	7	
5 Jayapu	01234679	012346789	012346789	012346789	012346789	01234678	047	7		
6 Guam	0123457	012345789	012345789	012345789	012345789	134579	1349	13		
7 Manila	12345689	012345689	012345689	012345689	012345689	12345689	1458	14589	1489	9
8 Songkh	1479	012345679	012345679	012345679	012345679	1234579	179	79	79	9
9 Cocos	01248	012345678	012345678	012345678	1345678	14678	468	78	78	78

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9





For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	12349	123459	123456789	1234567	134567	1356	16	56	5	
1 Darwin	023459	023456789	023456789	023456789	0235679	03567	0367	6	6	
2 ASprin	01349	01345679	013456789	01345678	134567	356	56	5		
3 Townsv	0125	0124569	012456789	01245678	01245678	0124567	1456	5	6	6
4 Derby	01239	012356789	012356789	0123569	0235679	03567	35			
5 Jayapu	136	01234679	012346789	01234678	01234678	01234678	23467	0236	06	
6 Guam		123457	012345789	01234578	01234578	0123457	012357	015	35	3
7 Manila	89	012345689	012345689	012345689	012345689	134568	568	58		
8 Songkh	479	01245679	012345679	01235679	35679	567	7	7		
9 Cocos	01248	012345678	012345678	13478	1478					

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	9	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	9	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 6  
 Sunspot Number = 50.00  
 Required SNR (dB-Hz) for comm = 40.0

Time-of-day (UT) = 2

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			23	234	12349	123459	134679	14679	1457	5
1 Darwin			245	2345	02345679	02345679	02356789	035679	067	678
2 ASprin			0134	0134	013459	01345679	1456789	56789	578	68
3 Townsv			02	0125	012456	0124567	0145679	145789	469	6
4 Derby			12	0129	0123579	012356789	02356789	03589	03579	5679
5 Jayapu			1	136	12346	012346789	1234679	12346789	024679	046
6 Guam				5	57	123457	012345	01258	1358	12345
7 Manila			8	8	14689	1245689	01234589	012358	012458	1489
8 Songkh			7	7	79	579	12479	0245679	279	1279
9 Cocos				4	012478	0124578	01234578	0123458	3458	478

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	6	8	8	8	8	8	8	8	8	8
1 Darwin	8	9	9	9	9	9	9	9	9	9
2 ASprin	8	9	9	9	9	9	9	9	9	9
3 Townsv	7	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	6	8	8	8	8	8	8	8	8	8
7 Manila	3	9	9	9	9	9	9	9	9	9
8 Songkh	7	8	8	8	8	8	8	8	8	8
9 Cocos	8	8	8	8	8	8	8	8	8	8

Time-of-day (UT) = 6

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad		23	23	12345	123456	1234569	134679	14679	1457	5
1 Darwin		234	2345	023456	0234567	02345679	0235679	0235679	03678	068
2 ASprin		0134	0134	01345	013456	01345679	13456789	1456789	57	
3 Townsv		0125	0125	012456	0124567	0124567	0145679	1459	1469	467
4 Derby		12	12	01235	01235679	01235679	02356789	023579	03579	356789
5 Jayapu		36	156	0123467	0123467	01234679	1234679	12346789	024679	046
6 Guam		5	5	1357	012357	0123457	01234578	01257	13578	1345
7 Manila				568	14568	01234568	012345689	0124568	01245689	13489
8 Songkh				7	7	5679	679	579	1679	012479
9 Cocos					14	0123458	012345678	0123458	345678	478

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	7	8	8	8	8	8	8	8	8	8
1 Darwin	8	9	9	9	9	9	9	9	9	9
2 ASprin	8	9	9	9	9	9	9	9	9	9
3 Townsv	7	8	8	8	8	8	8	8	8	8
4 Derby	8	9	9	9	9	9	9	9	9	9
5 Jayapu	8	9	9	9	9	9	9	9	9	9
6 Guam	8	8	8	8	8	8	8	8	8	8
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	6	8	8	8	8	8	8	8	8	8
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	1234	12345	1234569	12345679	134679	14578	5			
1 Darwin	02345	0234569	02345679	02345679	023456789	02356789	5678	67	679	6789
2 ASprin	0134	01345	01345679	013456789	1456789	156789	5678	8	6	
3 Townsv	01245	012456	01245679	01245679	01456789	1456789	4578	678	6	6
4 Derby	0123	012359	01235679	012356789	012356789	02356789	356789	589	79	67
5 Jayapu	12346	012346	01234679	012346789	12346789	012346789	012346789	479	7	
6 Guam	5	123457	0123457	012345789	012345789	12345789	1245789	13789	1237	134
7 Manila		14568	01234568	012345689	012345689	012345689	12345689	1235689	14568	1489
8 Songkh			7	12345679	012345679	012345679	12345679	2345679	79	179

Step 3 Results for: Month = June, Sunspot # = 50, Required SNR = 40 dB-Hz,

40JUN80.OUT

D-3b-2

9 Cocos 4 012345 012345678 012345678 12345678 45678 148 78

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	8	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9
3 Townsv	8	9	9	9	9	9	9	9	9	9
4 Derby	9	9	9	9	9	9	9	9	9	9
5 Jayapu	9	9	9	9	9	9	9	9	9	9
6 Guam	9	9	9	9	9	9	9	9	9	9
7 Manila	9	9	9	9	9	9	9	9	9	9
8 Songkh	9	9	9	9	9	9	9	9	9	9
9 Cocos	9	9	9	9	9	9	9	9	9	9

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	1234	123459	12345679	134678	145					
1 Darwin	023459	0234569	023456789	02356789	0356789	6789	67			
2 ASprin	01349	013459	013456789	1345678	578					
3 Townsv	01245	0124569	012456789	012456789	14578	6	6			
4 Derby	01239	0123569	012356789	02356789	0356789	579	67	7		
5 Jayapu	1234	01234679	012346789	12346789	012346789	0478	7			
6 Guam	5	123457	012345789	012345789	1245789	1379	134			
7 Manila	1	12345689	012345689	012345689	12345689	145689	1458	149	9	
8 Songkh		79	12345679	012345679	12345679	1579	79	9	9	
9 Cocos	4	012345	012345678	12345678	145678	14678	8	78	78	

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	8	9	9	9	9	9	9	9	9	9
1 Darwin	9	9	9	9	9	9	9	9	9	9
2 ASprin	9	9	9	9	9	9	9	9	9	9



For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	23	12349	123459	1234567	134567	136	6	5		
1 Darwin	24	023459	0234567	0235679	023567	03567	36	6		
2 ASprin	0134	013459	0134579	0134567	1356	56	5			
3 Townsv	02	01245	0124569	01245678	0124567	01456	145	5	6	6
4 Derby	129	012359	01235679	023569	03567	35	3			
5 Jayapu		12346	01234679	01234678	0123467	123467	2367	036		
6 Guam		5	13457	01234578	01234578	012357	0157	15	3	3
7 Manila		148	1234568	01235689	0134568	1568	568			
8 Songkh		479	14579	35679	67	57	7			
9 Cocos	4	01248	023458	1478						

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	7	8	8	8	8	8	8	8	8	8
1 Darwin	7	8	8	8	8	8	8	8	8	8
2 ASprin	7	8	8	8	8	8	8	8	8	8
3 Townsv	8	9	9	9	9	9	9	9	9	9
4 Derby	8	8	8	8	8	8	8	8	8	8
5 Jayapu	8	9	9	9	9	9	9	9	9	9
6 Guam	8	8	8	8	8	8	8	8	8	8
7 Manila	8	9	9	9	9	9	9	9	9	9
8 Songkh	5	7	7	7	7	7	7	7	7	7
9 Cocos	6	8	8	8	8	8	8	8	8	8

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 6  
 Sunspot Number = 50.00  
 Required SNR (dB-Hz) for comm = 60.0

Time-of-day (UT) = 2  
 For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad				2	2	34	14	14		
1 Darwin				4	245	235	03	0	7	
2 ASprin				03	0134	14	5	5		
3 Townsv				2	2	015	145	4		
4 Derby				1	12	02	0359	0359	579	79
5 Jayapu					16	136	2347	246	46	6
6 Guam					5	5		5	5	5
7 Manila				8	8		5			4
8 Songkh				7	7			9	9	
9 Cocos							48	48	48	47

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	2	3	4	4	4	4	4	4	4	4
1 Darwin	3	5	6	6	6	6	6	6	6	6
2 ASprin	4	5	5	5	5	5	5	5	5	5
3 Townsv	3	4	5	5	5	5	5	5	5	5
4 Derby	4	6	7	7	7	7	7	7	7	7
5 Jayapu	4	6	6	6	6	6	6	6	6	6
6 Guam	1	1	1	1	1	1	1	1	1	1
7 Manila	1	2	3	3	3	3	3	3	3	3
8 Songkh	1	2	2	2	2	2	2	2	2	2
9 Cocos	2	3	3	3	3	3	3	3	3	3

Time-of-day (UT) = 6  
 For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad			23	23	23	134	14	14	5	
1 Darwin			24	34	2345	0235	035	06		
2 ASprin			013	03	0134	14	5	5		
3 Townsv			2	012	012	015	145	4	6	
4 Derby			1	12	12	023	035	0359	579	79
5 Jayapu				136	136	12346	123467	246	4	
6 Guam				5	5	5	5	5	3	
7 Manila						8	5		4	4
8 Songkh						7				
9 Cocos								4	4	4

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	3	4	5	5	5	5	5	5	5	5
1 Darwin	4	6	6	6	6	6	6	6	6	6
2 ASprin	4	5	5	5	5	5	5	5	5	5
3 Townsv	3	5	6	6	6	6	6	6	6	6
4 Derby	4	6	7	7	7	7	7	7	7	7
5 Jayapu	6	6	6	6	6	6	6	6	6	6
6 Guam	1	2	2	2	2	2	2	2	2	2
7 Manila	1	2	3	3	3	3	3	3	3	3
8 Songkh	1	1	1	1	1	1	1	1	1	1
9 Cocos	1	1	1	1	1	1	1	1	1	1

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	2	23	1234	14	14					
1 Darwin	4	245	2345	02345	035	56	67	67	67	
2 ASprin	0	0134	0134	14	5					
3 Townsv		02	01245	145	145			6		
4 Derby	1	12	123	0123	035	59	59	7	7	7
5 Jayapu		13	13	12346	12346	1246	47	7		
6 Guam			5	135	12345	1345	17	137	1	
7 Manila				1	1456	14568	1568	1568	14	4
8 Songkh						7	79	79	9	



9 Cocos

4 4 4 14 4 8 7

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	4	4	4	4	4	4	4	4	4	4
1 Darwin	5	7	7	7	7	7	7	7	7	7
2 ASprin	4	5	5	5	5	5	5	5	5	5
3 Townsv	5	6	6	6	6	6	6	6	6	6
4 Derby	4	6	7	7	7	7	7	7	7	7
5 Jayapu	5	6	6	6	6	6	6	6	6	6
6 Guam	5	6	6	6	6	6	6	6	6	6
7 Manila	5	5	5	5	5	5	5	5	5	5
8 Songkh	2	2	2	2	2	2	2	2	2	2
9 Cocos	2	3	4	4	4	4	4	4	4	4

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad	2	23	134	1						
1 Darwin	4	234	235	0	6	67				
2 ASprin	3	0134	134							
3 Townsv	2	12	014	45						
4 Derby	1	12	023	39						
5 Jayapu		13	1234	12346	4					
6 Guam			15	15	1					
7 Manila			1	158	1568	145	1			
8 Songkh					79	9	9			
9 Cocos			4	4		8	8	8		

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	3	4	4	4	4	4	4	4	4	4
1 Darwin	3	5	6	7	7	7	7	7	7	7
2 ASprin	4	4	4	4	4	4	4	4	4	4

3 Townsv	3	4	5	5	5	5	5	5	5	5	5	5
4 Derby	3	4	5	5	5	5	5	5	5	5	5	5
5 Jayapu	5	5	5	5	5	5	5	5	5	5	5	5
6 Guam	2	2	2	2	2	2	2	2	2	2	2	2
7 Manila	4	5	5	5	5	5	5	5	5	5	5	5
8 Songkh	2	2	2	2	2	2	2	2	2	2	2	2
9 Cocos	1	2	2	2	2	2	2	2	2	2	2	2

Time-of-day (UT) = 18

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad		23	1234	14						
1 Darwin	4	234	0234	0						
2 ASprin	3	0134	0134							
3 Townsv		12	0124	4						
4 Derby	1	12	0123	039						
5 Jayapu		1	1234							
6 Guam			5							
7 Manila			1	158						
8 Songkh				79	9					
9 Cocos			4		8					

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	4	4	4	4	4	4	4	4	4	4
1 Darwin	4	4	4	4	4	4	4	4	4	4
2 ASprin	4	4	4	4	4	4	4	4	4	4
3 Townsv	4	4	4	4	4	4	4	4	4	4
4 Derby	4	5	5	5	5	5	5	5	5	5
5 Jayapu	4	4	4	4	4	4	4	4	4	4
6 Guam	1	1	1	1	1	1	1	1	1	1
7 Manila	3	3	3	3	3	3	3	3	3	3
8 Songkh	2	2	2	2	2	2	2	2	2	2
9 Cocos	1	2	2	2	2	2	2	2	2	2

Time-of-day (UT) = 22

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad		2	23	134	13					
1 Darwin		24	2345	0235	0356	6	6			
2 ASprin		0134	0134	135	5	5				
3 Townsv		2	0125	01245	0145	45	5			
4 Derby		12	012	03	35	35				
5 Jayapu			136	1236	12346	23467	3			
6 Guam			5	5	5	157	1			
7 Manila				8	56	56				
8 Songkh				7						
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	3	4	4	4	4	4	4	4	4	4
1 Darwin	4	6	6	6	6	6	6	6	6	6
2 ASprin	4	5	5	5	5	5	5	5	5	5
3 Townsv	5	5	5	5	5	5	5	5	5	5
4 Derby	3	5	5	5	5	5	5	5	5	5
5 Jayapu	5	6	6	6	6	6	6	6	6	6
6 Guam	3	3	3	3	3	3	3	3	3	3
7 Manila	2	3	3	3	3	3	3	3	3	3
8 Songkh	1	1	1	1	1	1	1	1	1	1
9 Cocos	0	0	0	0	0	0	0	0	0	0

Power (kW) = 1.000  
 Noise (-dBW/Hz at 3 MHz) = 150.00  
 Month = 6  
 Sunspot Number = 50.00  
 Required SNR (dB-Hz) for comm = 80.0

Time-of-day (UT) = 2

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 6

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 10

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										

# 9 Cocos

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 14

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0

3 Townsv	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 18

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0

Time-of-day (UT) = 22

Step 3 Results for: Month = June, Sunspot # = 50, Required SNR = 80 dB-Hz,

80JUN50.OUT

D-3d-4

For each Tx node and freq, list the Rx nodes that can be communicated with.

Tx Node	3 MHz	6 MHz	9 MHz	12 MHz	15 MHz	18 MHz	21 MHz	24 MHz	27 MHz	30 MHz
0 Adelad										
1 Darwin										
2 ASprin										
3 Townsv										
4 Derby										
5 Jayapu										
6 Guam										
7 Manila										
8 Songkh										
9 Cocos										

For each Tx node, list the number of Rx nodes that can be communicated with as a function of number of frequencies.

Tx Node	1 Freq	2 Freqs	3 Freqs	4 Freqs	5 Freqs	6 Freqs	7 Freqs	8 Freqs	9 Freqs	10 Freqs
0 Adelad	0	0	0	0	0	0	0	0	0	0
1 Darwin	0	0	0	0	0	0	0	0	0	0
2 ASprin	0	0	0	0	0	0	0	0	0	0
3 Townsv	0	0	0	0	0	0	0	0	0	0
4 Derby	0	0	0	0	0	0	0	0	0	0
5 Jayapu	0	0	0	0	0	0	0	0	0	0
6 Guam	0	0	0	0	0	0	0	0	0	0
7 Manila	0	0	0	0	0	0	0	0	0	0
8 Songkh	0	0	0	0	0	0	0	0	0	0
9 Cocos	0	0	0	0	0	0	0	0	0	0



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